THE ARCHITECTS' JOURNAL



standard contents

every issue does not necessarily contain all these contents, but they are the regular features which continually recur

NEWS and COMMENT

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CURRENT BUILDING

Major Buildings described:
Details of Planning, Construction, Finishes and Costs
Buildings in the News
Building Costs Analysed

Architectural Appointments Wanted and Vacant

No. 3448] [Vol. 133

THE ARCHITECTURAL PRESS

9, 11 *and* 13, *Queen Anne's Gate, Westminster, S.W.1.* *Telephone: Whitehall* 0611

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Registered as a Newspaper.

★ A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their addresses and telephone numbers. The glossary is published in two parts—A to Ii one week, Il to Z the next. In all cases where the town is not mentioned the word LONDON is implicit in the address.

AA	Architectural Association, 34/6, Bedford Square, W.C.1.	Museum 0974
AAI	Association of Art Institutions. Secy.: J. H. Holden, College of Art, Cavendish Street, Manchester 15	
ABS	Architects' Benevolent Society. 66, Portland Place, W.1.	Langham 5533
ABT	Association of Building Technicians. 156, Waterloo Road, S.E.1.	Waterloo 5427/8
ACGB	Arts Council of Great Britain. 4, St. James's Square, S.W.1.	Whitehall 9737
ADA	Aluminium Development Association. 33, Grosvenor Street, W.1.	Mayfair 7501/8
ARCUK	Architects' Registration Council. 68, Portland Place, W.1.	Langham 5861
BAE	Board of Architectural Education. 66, Portland Place, W.1.	Langham 5721
BASA	British Architectural Students Association. Building Centre, 26 Store Street, W.C.1.	
BC	Building Centre, 26, Store Street, Tottenham Court Road, W.C.1.	Museum 5400
BCC	British Colour Council. 13, Portland Square, W.1.	Welbeck 4185
BCCF	British Cast Concrete Federation. 105, Uxbridge Road, Ealing, W.5.	Ealing 9621
BCIRA	British Cast Iron Research Association. Alvechurch, Birmingham	Redditch 716
BDA	British Door Association. 10, The Boltons, S.W.10.	Fremantle 8494
BE	Building Exhibition. 11, Manchester Square, W.1.	Hunter 1951
BEDA	British Electrical Development Association, 2, Savoy Hill, W.C.2.	Temple Bar 9434
BIA	British Ironfounders' Association. 145, Vincent Street, Glasgow, C.2.	Glasgow Central 2891
BID	Building Industries Distributors. 52, High Holborn, W.C.1.	Chancery 7772
BINC	Building Industries National Council. 11, Weymouth Street, W.1.	Langham 2785
BOT	Board of Trade. Whitehall Gardens, Horseguards Avenue, S.W.1.	Trafalgar 8855
BRS	Building Research Station. Bucknalls Lane, Watford.	Garston 4040
BSA	Building Societies Association. 14, Park Street, W.1.	Mayfair 0515
BSI	British Standards Institution. British Standards House, 2, Park St., W.1.	Mayfair 9000
CABAS	City and Borough Architects Society. C/o S. A. G. Cook, A.R.I.B.A., Borough Architect and Director of Housing, Town Hall, High Holborn, W.C.1.	Holborn 3411
CAS	County Architects' Society. C/o J. Hurst, A.R.I.B.A., County Hall, Dorchester.	
CCA	Cement and Concrete Association. 52, Grosvenor Gardens, S.W.1.	Belgravia 6661
CDA	Copper Development Association. 55, South Audley Street, W.1.	Grosvenor 8811
COID	Council of Industrial Design. 28, Haymarket, S.W.1.	Trafalgar 8000
CPRE	Council for the Preservation of Rural England, 4, Hobart Place, S.W.1.	Sloane 4280
CUC	Coal Utilization Council. 3, Upper Belgrave Street, S.W.1.	Sloane 9116
DIA	Design and Industries Association. 13, Suffolk Street, S.W.1.	Whitehall 0540
EJMA	English Joinery Manufacturers' Association (Incorporated). Sackville House, 40, Piccadilly, W.1.	Regent 4448
EPNS	English Place-Name Society. 7, Selwyn Gardens, Cambridge.	
FAS	Faculty of Architects and Surveyors. 68, Gloucester Place, W.1.	Welbeck 9966
FASS	Federation of Associations of Specialists and Sub-Contractors. 14, Bryanston Street, W.1.	Welbeck 1781
FBBDO	Fibre Building Board Development Organization Ltd. (Fidor). Stafford House, Norfolk Street, W.C.2.	Covent Garden 3008
FBI	Federation of British Industries. 21, Tothill Street, S.W.1.	Whitehall 6711
FC	Forestry Commission. 25, Savile Row, W.1.	Regent 0221
FCMI	Federation of Coated Macadam Industries. 37, Chester Square, S.W.1.	Sloane 1002
FDMA	Flush Door Manufacturers Association Ltd. Trowell, Nottingham.	Ilkeston 623
FLD	Friends of the Lake District. Pennington House, nr. Ulverston, Lancs.	Ulverston 201
FMB	Federation of Master Builders. 33, John Street, W.C.1. Tel.: Chancery 7583 (6 lines)	
FPC	Federation of Painting Contractors. St. Stephen's House, S.W.1.	Whitehall 3902
FRHB	Federation of Registered House Builders. 82, New Cavendish Street, W.1.	Langham 4341
GPDA	Gypsum Plasterboard Development Association. 11, Ironmonger Lane, E.C.2.	Monarch 8888
GC	Gas Council. 1, Grosvenor Place, S.W.1.	Belgravia 4321
GG	Georgian Group. 2, Chester Street, S.W.1.	Belgravia 3081
HC	Housing Centre. 13, Suffolk Street, S.W.1.	Whitehall 2881
IAAS	Incorporated Association of Architects and Surveyors. 29, Belgrave Square, S.W.1.	Belgravia 3755
ICA	Institute of Contemporary Arts. 17-18, Dover Street, W.1.	Grosvenor 6186
ICE	Institution of Civil Engineers. 1, Great George Street, S.W.1.	Whitehall 4577
IEE	Institution of Electrical Engineers. Savoy Place, Victoria Embankment, W.C.2.	Temple Bar 7676
IES	Illuminating Engineering Society. 32, Victoria Street, S.W.1.	Abbey 5215
IGE	Institution of Gas Engineers. 17, Grosvenor Crescent, S.W.1.	Sloane 8266
IHVE	Institution of Heating and Ventilating Engineers. 49, Cadogan Square.	Sloane 1601/3158
IIBDID	Incorporated Institute of British Decorators and Interior Designers. 27 Soho Square, W.1.	Gerrard 5056

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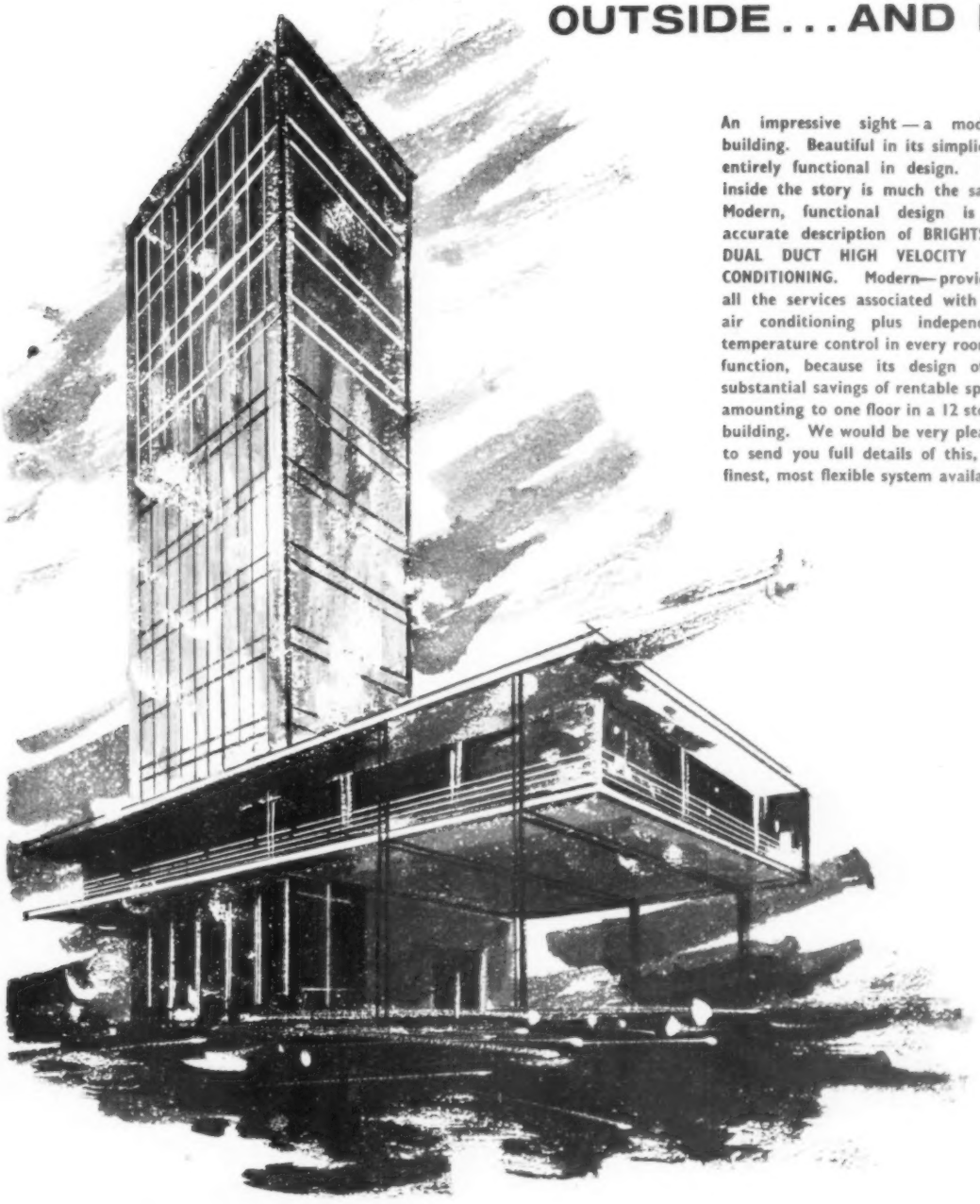
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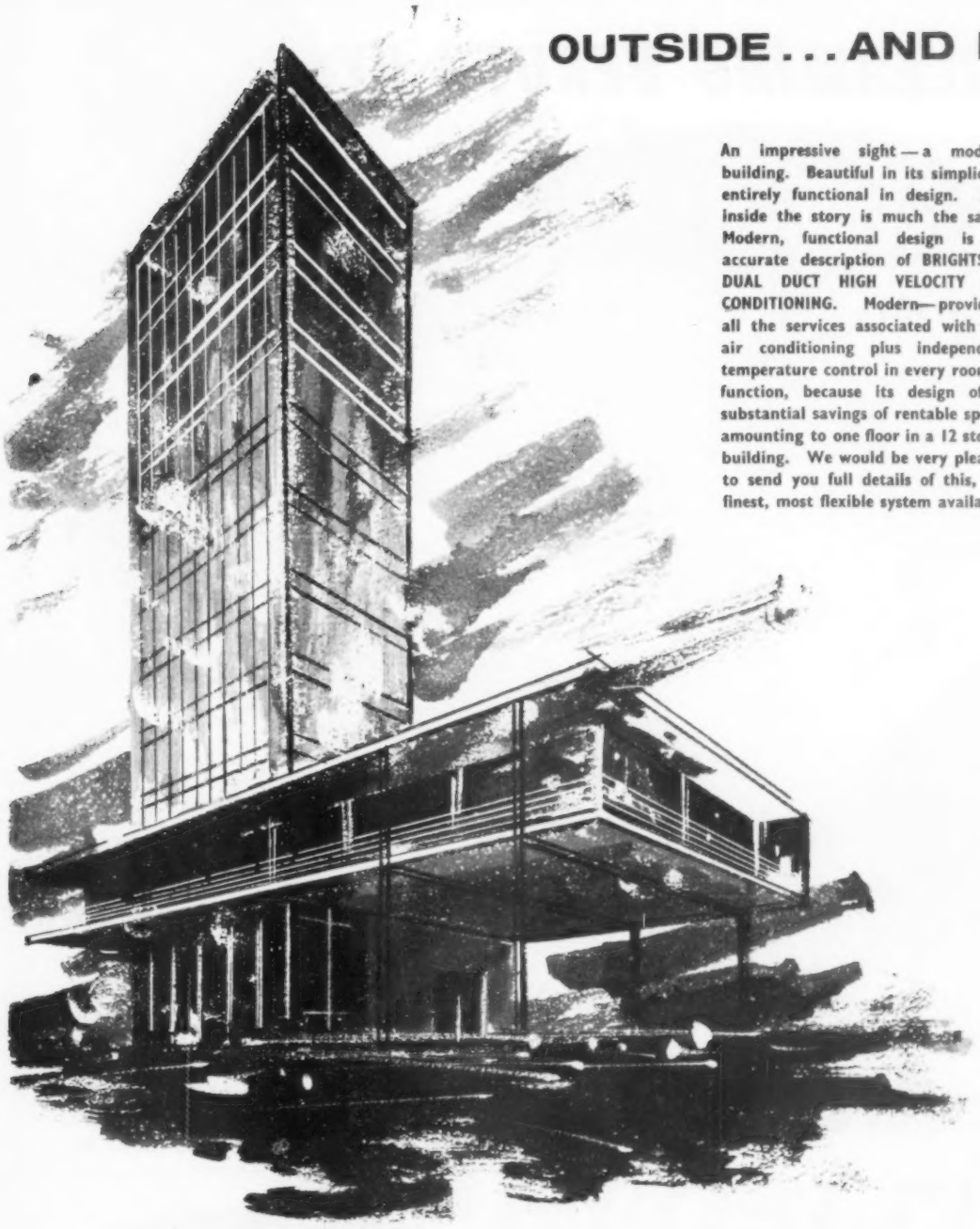
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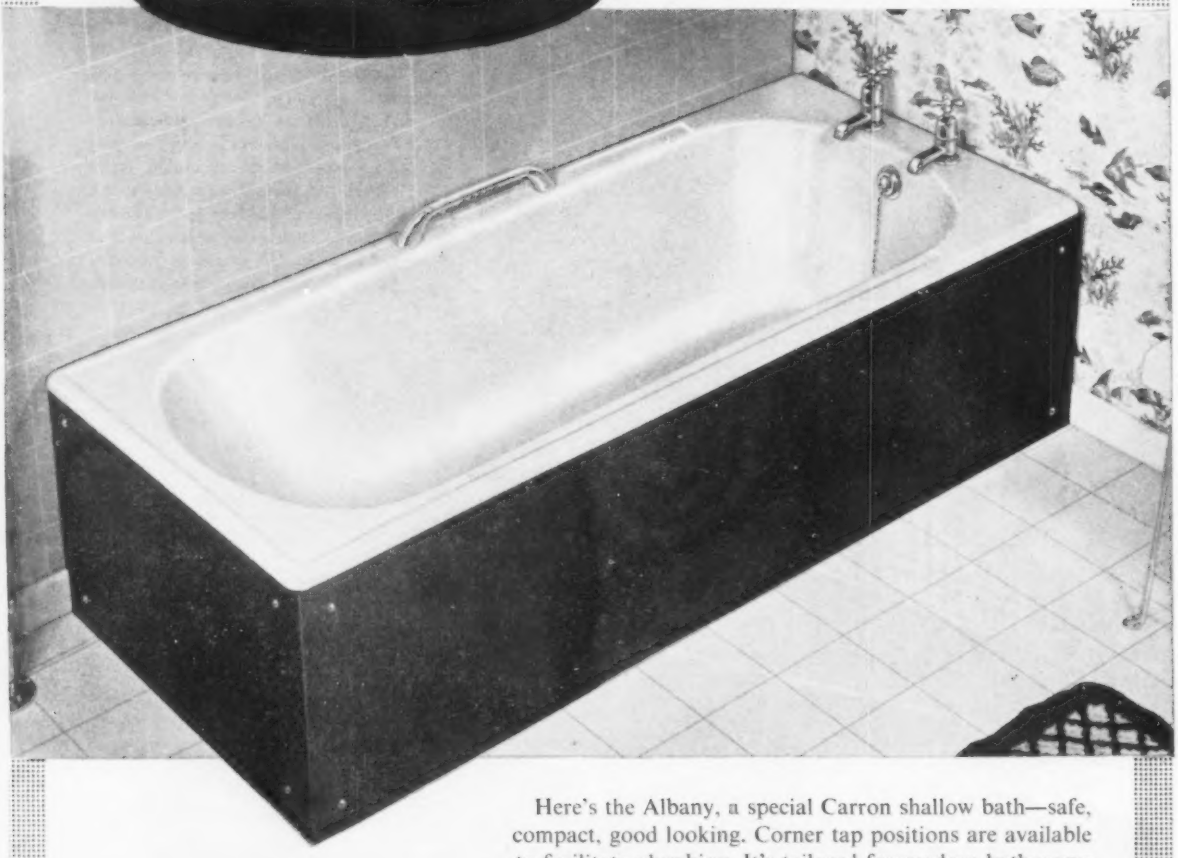
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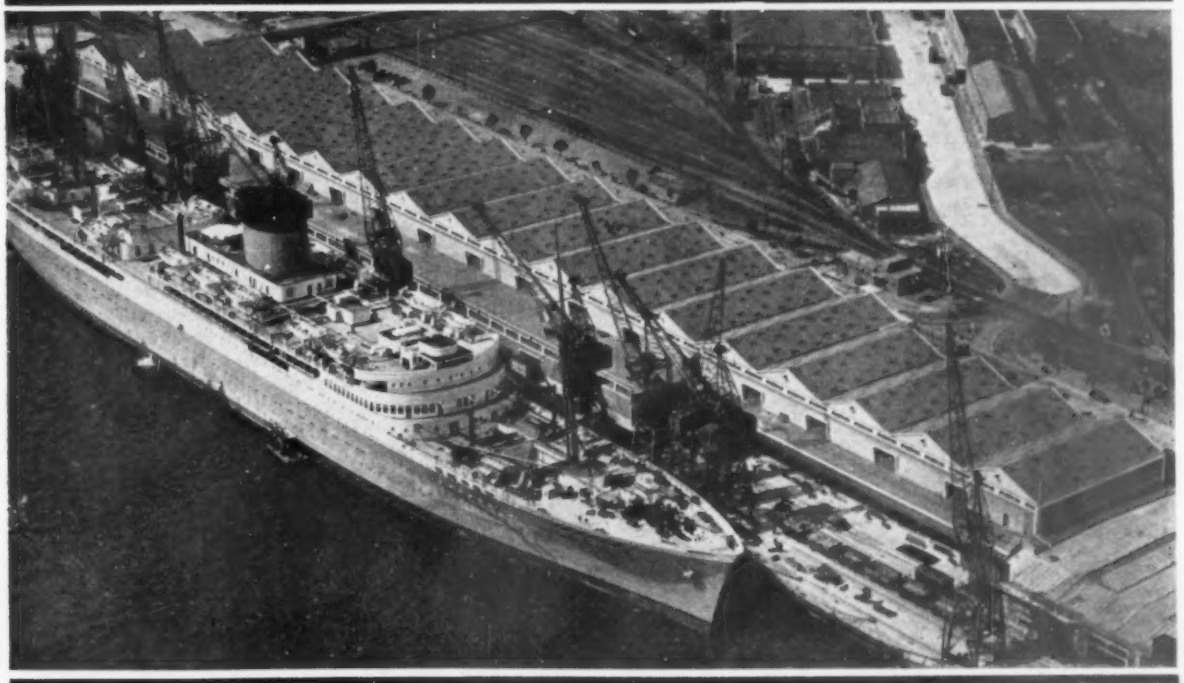
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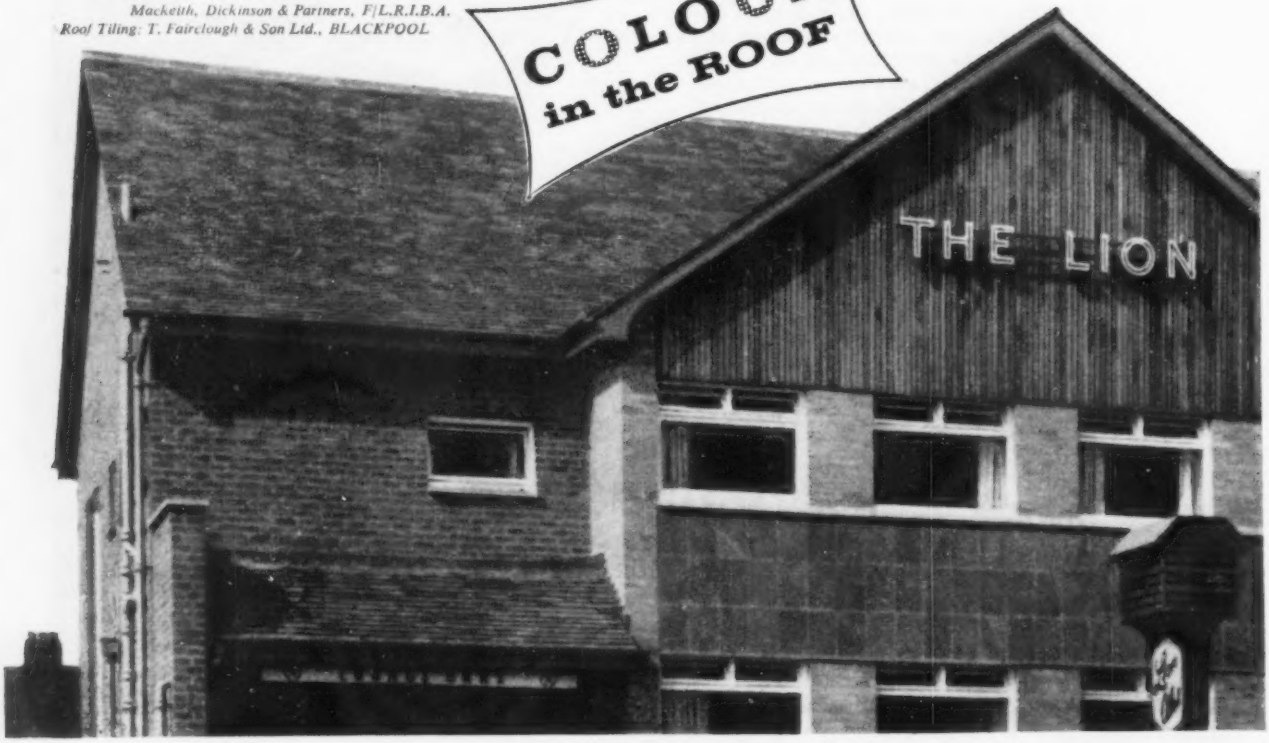
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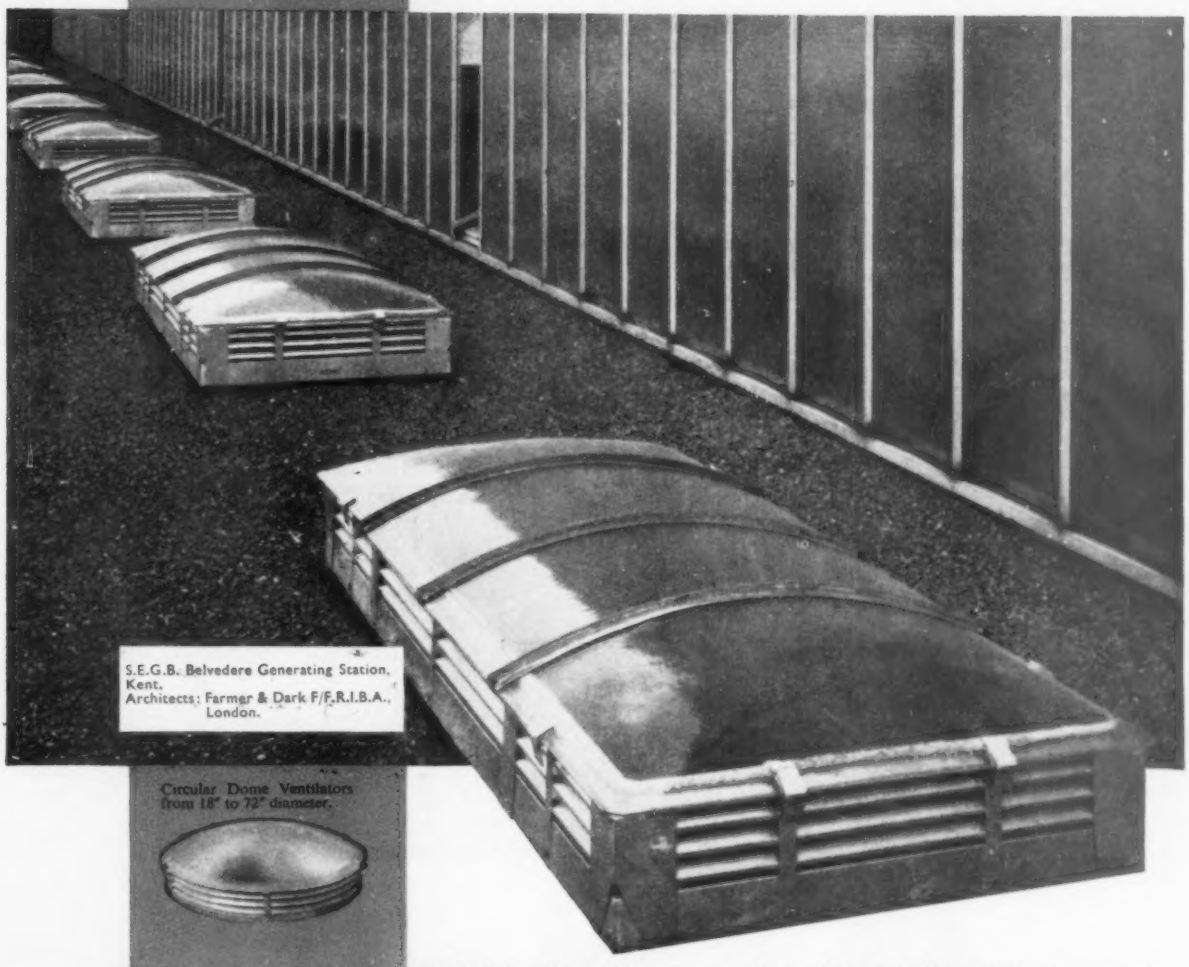
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The Architects' Journal
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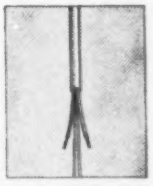
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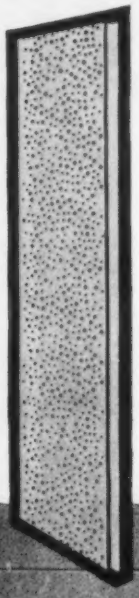
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Fixing Contractor: Rudders & Paynes Ltd., Birmingham

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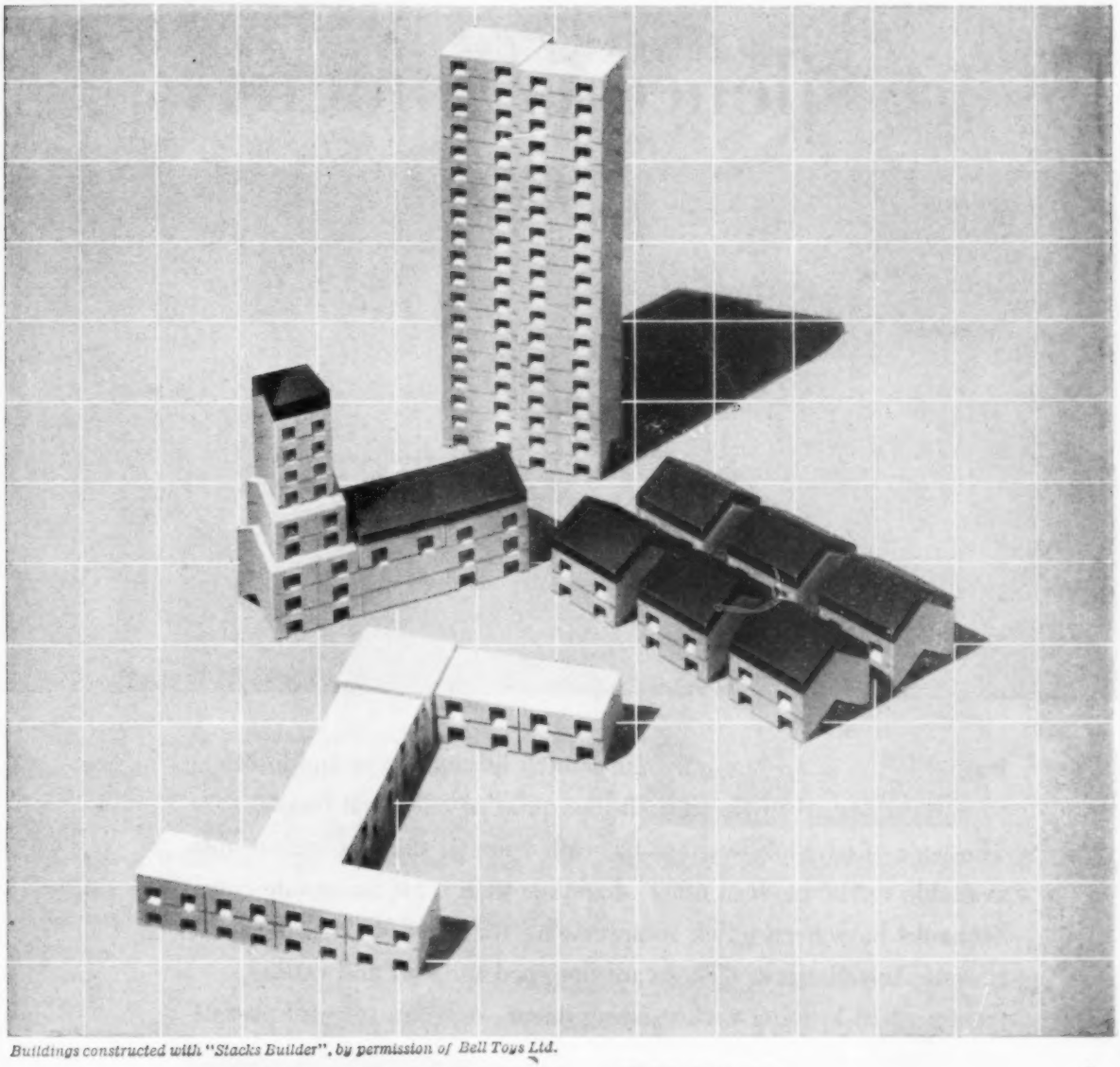
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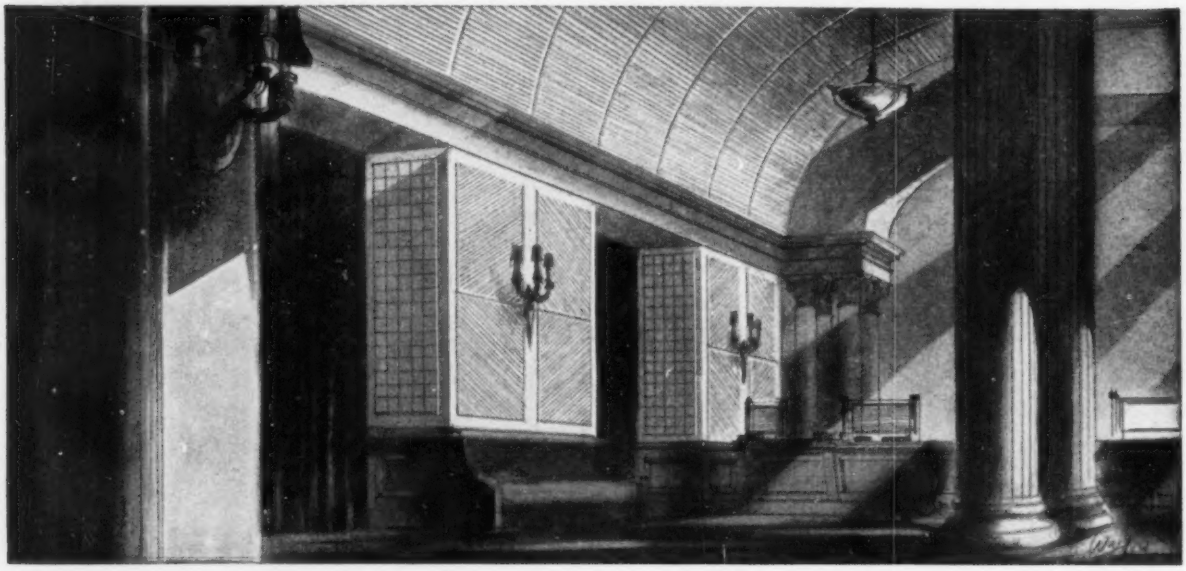
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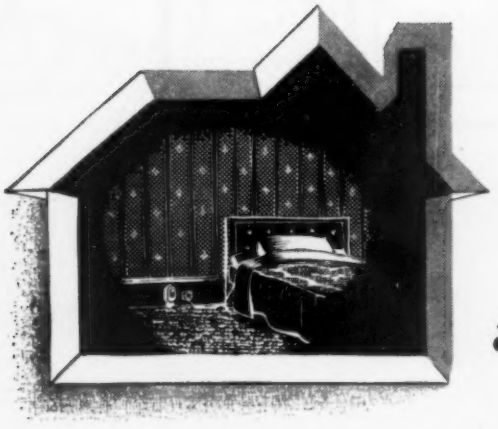


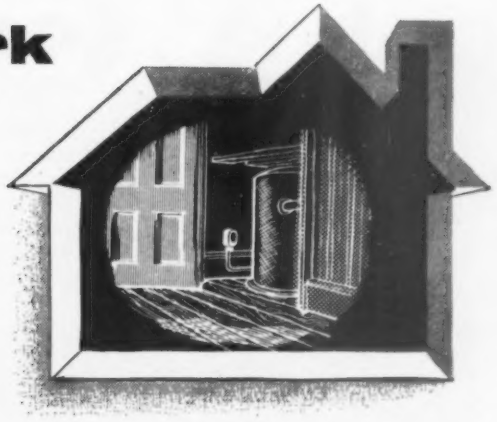
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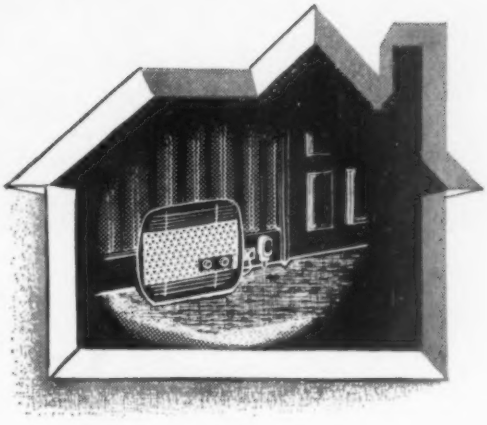
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Telephone: Grosvenor 4324

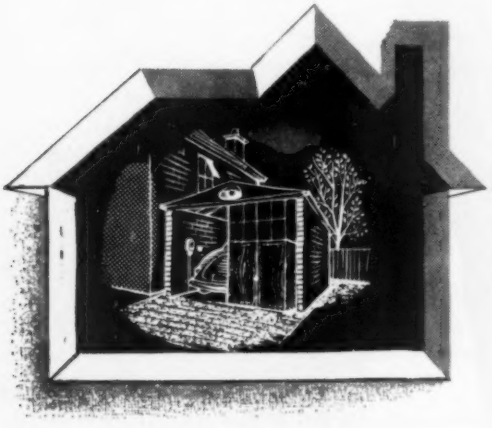
Put VENNER to work about the house



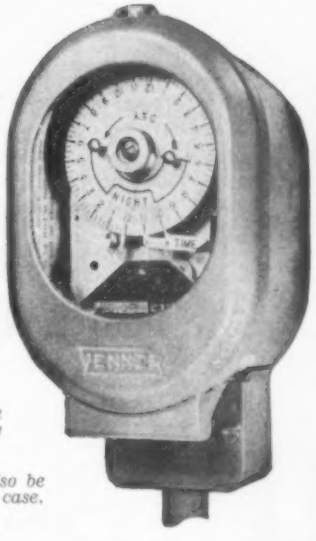




The average home today relies more and more on electrical equipment which can prove expensive if it is not properly controlled . . . immersion and under floor heating, for example. The Time Switch type MD1QP illustrated can switch an immersion heater off at night as well as on again in the morning while the family are still sleeping, saving power overnight but still providing hot water when it is needed. It can also control an electric blanket, porch or drive lighting, or a wireless set used as an early morning alarm.



Once set, the Time Switch needs no attention. The clock is electrically actuated; an external switch allows the appliance which it controls to be turned off when it is not needed. There are many variations of the Venner Time Switch, all described in our No. 1 series of leaflets, free on request.



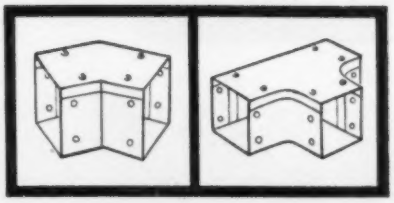
A cable cover is available for conduit wiring. Rating 20 amps. 200/250v. A.C.

The Time Switch can also be supplied in an all-plastic case.

Venner Limited, Kingston By-Pass, New Malden, Surrey. Telephone: MALden 2442

VENNER Time Switches

Power Centre trunking fittings. Precision made Speeds the job of installation. Layout extension or alteration made easy Shown right, H.E.T. Half Normal Bend and Normal Tee.



it's what you
don't see
that makes
Power Centre Trunking
so durable



ELECTRICAL DIVISION

POWER CENTRE

Poor J.B., he's been hanging around for days. Never said a word to anyone. Doc says it's trunking problems. "He needs a tonic", he said. So Doc, who gets to the bottom of everyone's troubles, prescribed Power Centre, the people who make jig made trunking that's got a hidden coating of zinc which ensures long lasting protection. This P.C. treatment has re-vitalised J.B. Already, he's feeling on top of the world with the satisfaction of knowing he can cut installation costs by as much as 33⅓%.
J.B. is a different person now, thanks to Power Centre. What's more, he fully recommends a dose of P.C. to anyone who's suffering from trunking problems.

If you're in this unnecessary predicament, take the first step to satisfaction by sending for P.C.'s fully descriptive literature.

Address to:
THE POWER CENTRE CO., LTD.
P.O. BOX 18, LLOYD STREET,
WEDNESBURY, STAFFS.
Telephone: Wednesbury 1311.

Stocks in all Simplex Branches throughout the country.

ROBERTSON FERVENT



Hinged hood for easy access to motor and fan. All maintenance on FERVENT can be carried out from the roof surface.

a new mechanical extract unit suitable for any type of roof covering

- *Available with aluminium or coloured plastic weathering hood*
- *Fan and motor easily accessible for maintenance purposes*
- *Capacity capacities to suit most needs*
- *For intermittent operation, shutters can be provided to prevent back draught*

FERVENT

the latest in mechanical ventilation

RP

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ELLESMERE PORT · WIRRAL · CHESHIRE

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No Postage Stamp necessary if posted in Great Britain or Northern Ireland.

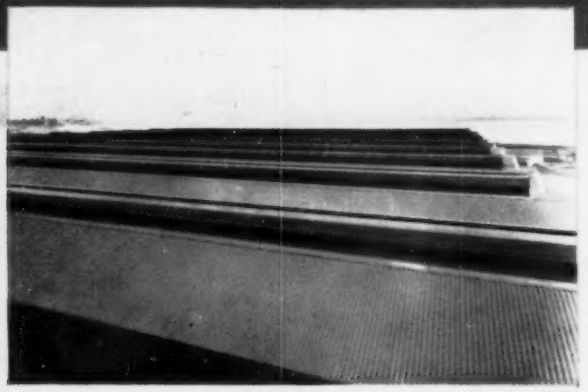
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ROBERTSON THAIN LIMITED
ELLESMERE PORT
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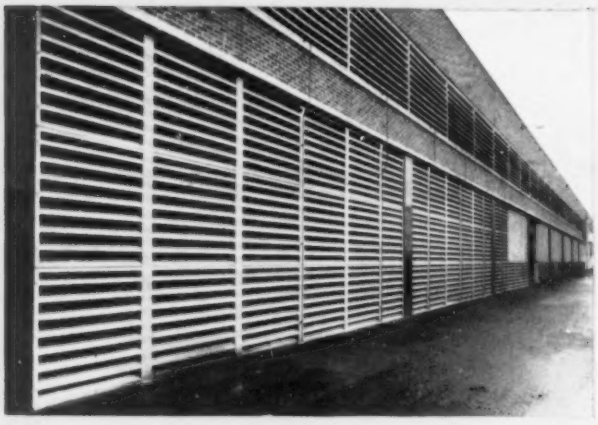
ROBERTSON *Natural* VENTILATION EQUIPMENT



Robertson Round Ventilators are the most efficient natural ventilators in the world. Guaranteed exhaust capacities under varying conditions of temperature difference and wind speed.



Robertson Ventilators blend harmoniously with the ridge line of a building. They provide a long, continuous exhaust area at the ridge of the roof and remove large volumes of smoke and heat.



ROBERTSON AIR INLETS

No ventilation scheme, either natural or mechanical, is effective unless adequate provision is made for fresh air intake to replace the vitiated air exhausted.
Robertson Air Inlets should be evenly distributed around the building in as low a position as possible.

Write for full details of ROBERTSON VENTILATION EQUIPMENT

RP

ROBERTSON THAIN LIMITED · ELLESMERE PORT · WIRRAL · CHESHIRE

Please send literature on

- ☐ **FERVENT**
- ☐ **NATURAL VENTILATION PRODUCTS**

NAME

BUSINESS ADDRESS

V12

Consult

ROBERTSON

about all your ventilation problems

ROBERTSON THAIN LTD

ELLESMERE PORT · WIRRAL · CHESHIRE

Tel. Ellesmere Port 3622-9 Teleg. 'Robertroof'

Sales Offices

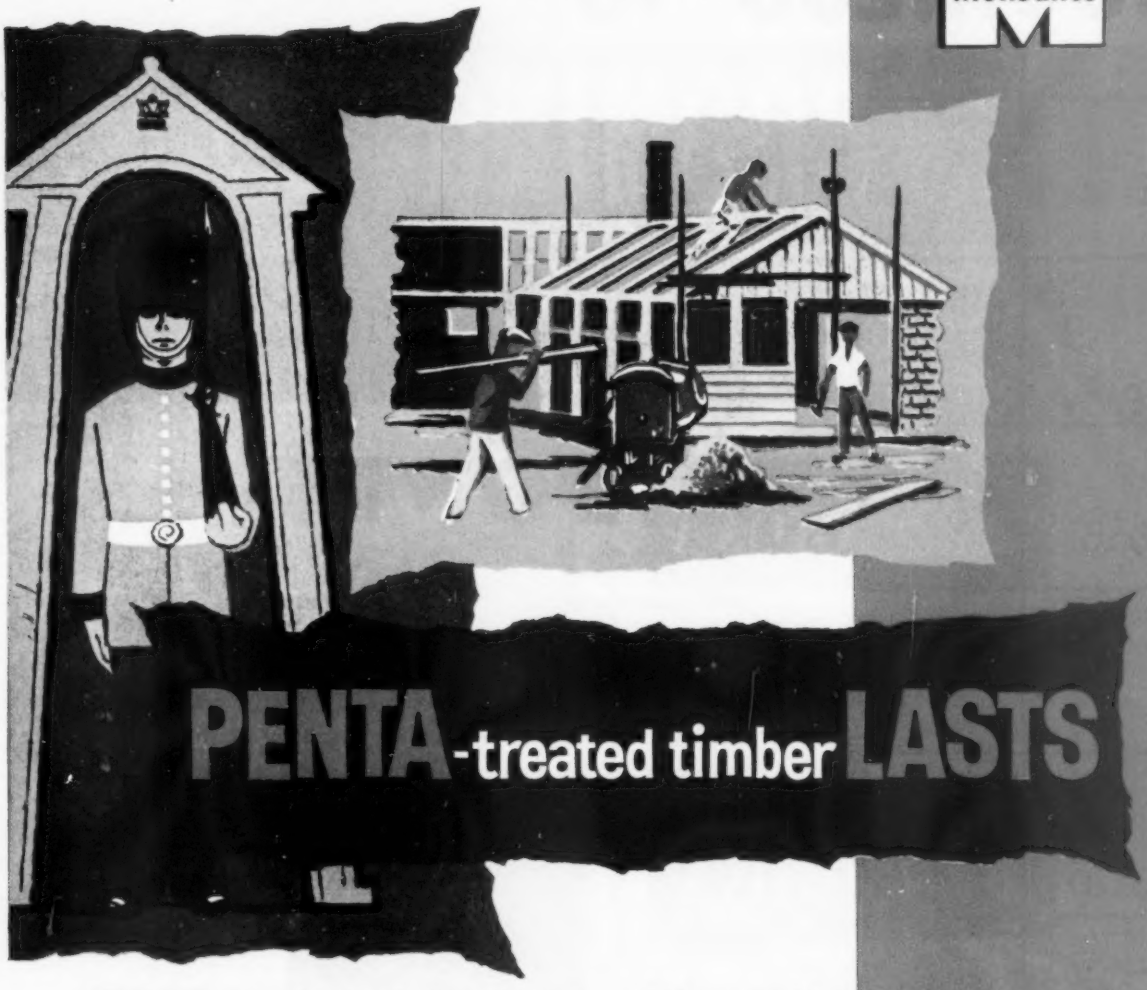
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V12

FROM HUTS TO HOUSES...

Monsanto



PENTA-treated timber LASTS

Wood preservatives based on Penta are the most powerful in commercial use. For Penta gives sure, long-lasting protection against wood's oldest enemies . . . dry rot, termites, furniture beetles, and long-horned and powder-post beetles.

Effective protection in wide range of uses
Penta can be easily applied to seasoned timber, fabricated timber or timber already in service. All with equally successful results.

No harmful effect on timber
Penta-treated timber is clean, unstained and does not require re-seasoning. Dimensional changes are negligible. Penta is chemically stable and virtually insoluble in water.

Architects and corporations
can now specify timber Penta-treated by pressure or non-pressure methods; Penta-treated timber is now available from timber merchants throughout Britain.

Builders and householders
can obtain Penta-based preservatives from the majority of wood preservative manufacturers. Monsanto will be glad to provide you with a list of suppliers in your area.

Monsanto chemicals help industry—to bring a better future closer.

Monsanto
Regd.

MONSANTO CHEMICALS LIMITED
939 Monsanto House, Victoria Street, London, S.W.1 and at Royal Exchange, Manchester 2.

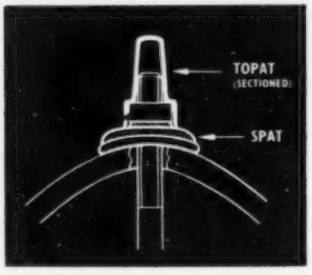
In association with: Monsanto Chemical Company, St. Louis, U.S.A. Monsanto Canada Limited, Montreal. Monsanto Chemicals (Australia) Ltd., Melbourne. Monsanto Chemicals of India Private Ltd., Bombay. Representatives in the world's principal cities.

BUSINESS IS BOOMING

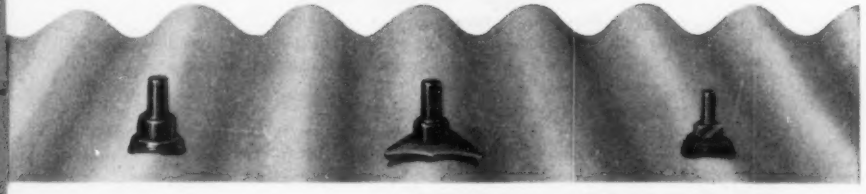
DOWTY
SPATS AND TOPATS

See how the sales curve follows the fast growing reputation of Spats and Topats. These plastic washers and caps for roof fixing and sealing have won a big following in the building industry and are now used by all the leading contractors.

SPATS
sizes available
$\frac{1}{4}$ in., $\frac{5}{16}$ in., and $\frac{1}{2}$ in.



TOPATS
sizes available
$\frac{1}{4}$ in. and $\frac{5}{16}$ in.



Spat and Topat assembly

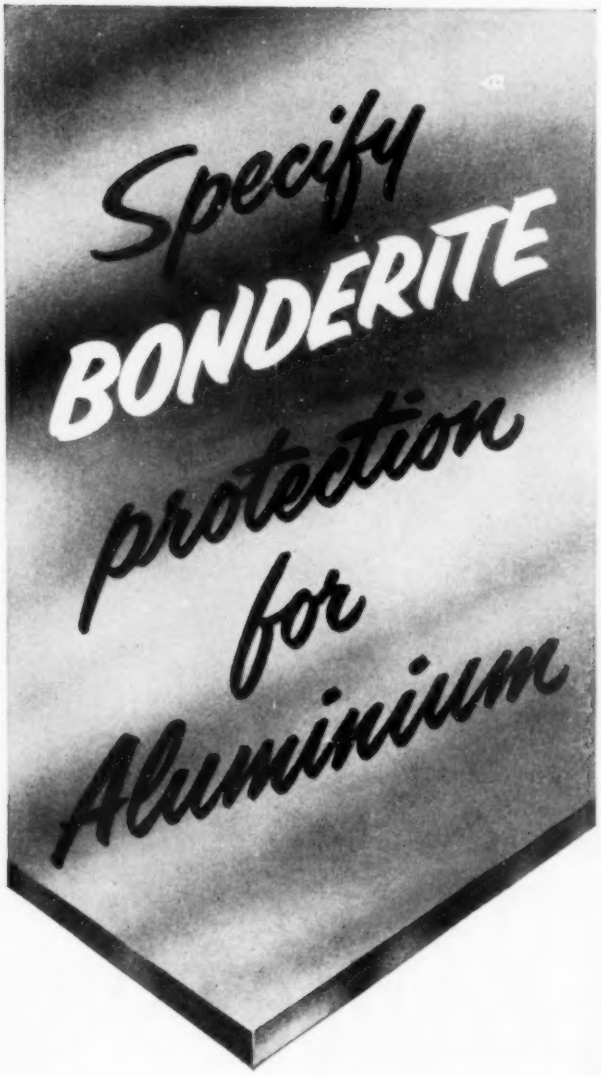
Topat with traditional washer

Spat only for non-corrosive atmospheres

DOWTY SEALS LIMITED - ASHCHURCH - GLOS.

Member of the Dowty Group

Telephone: Tewkesbury 2271



BONDERITE

- *Protects unpainted aluminium*
- *Provides an excellent key for paint*
- *Produces a coloured finish for unpainted surfaces*

Either as attractive finishes in their own right, or as a key for paint, Bonderite surface conversion processes provide effective protection for aluminium.

THE PYRENE COMPANY LTD
METAL FINISHING DIVISION
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What changes colour
when wet;
but keeps roofs dry?

Dinorwic *slate*

What's repellent
to acid
but pleasing to eyes?

Dinorwic *slate*

What's attractive
in texture, but
unattractive to lichen?

Dinorwic *slate*

What's practical,
colourful, economical and
almost indestructible?

Dinorwic *slate*

The Dinorwic Slate
Quarries Company Limited
Port Dinorwic
Caernarvonshire



NO PIPES, NO RADIATORS IN THIS BAXI-OIL HOUSE

WARM AIR CENTRAL HEATING SYSTEM

If there were a radiator behind these curtains, you'd see its outline. Then you'd think about all the heat channelled uselessly up to the ceiling or out of the window.

But in a BAXI-OIL house, this can't happen. For there are no radiators. No pipes, either. Nothing to leak, nothing to suffer frost damage, nothing to get in the way of furnishing and decoration. Just wonderful whole-house warmth; fresh, lively warmth with never a hint of stuffiness.



This grille—flush-fitted in wall or ceiling—is the only visible part of the BAXI-OIL system.

THE BAXI-OIL WARM AIR CENTRAL HEATING SYSTEM FILLS THE HOUSE WITH WARM, FRESH AIR—NOT WITH PIPES OR RADIATORS.

TECHNICAL SUMMARY

Air, directly heated in a compact 32,000 B.t.u./hr. heat exchanger, is ducted to adjustable grilles, up to eight in number and unobtrusively flush-fitted in ceilings or walls. The heat exchanger need occupy no living floor space. It can be installed in a cupboard 25in. by 25in. or placed in a garage or outhouse. A 8,000 B.t.u./hr. boiler, mounted on the heat exchanger base plate but functionally independent of it, eliminates the wasteful practice of running a central heating boiler below its economic output for summer hot water.

- ★ **No leaks**—because there is no water in the heating system
- ★ **Constant freshness**—air is recycled about three times an hour
- ★ **Cool in summer**—fan system can circulate unheated air
- ★ **Selective heating**—all grilles continuously adjustable
- ★ **Easy maintenance**—fan is only moving part
- ★ **Easy installation**—bends in lightweight ducting can be fabricated on site
- ★ **Attractive price**—£200-£250 retail, if installed during building

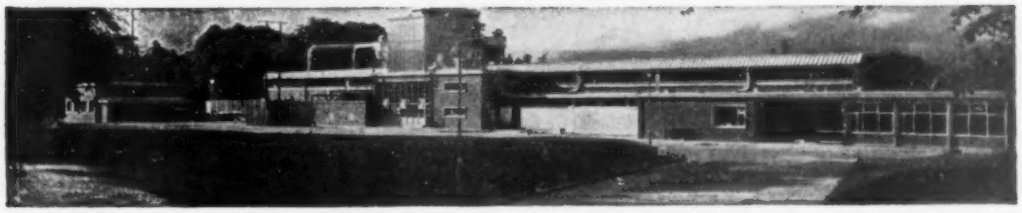
. . . and for cosy, open-fire comfort

BAXI PATENT FIRE

The BAXI Patent Fire is ideal for adding the comfort and companionship of an open fire to a centrally heated home—for the BAXI is as easy to run as central heating itself.



FREE, comprehensive brochures give full details of both BAXI-OIL and the BAXI Patent Fire. Use enquiry service or write to: **BAXI** (AJ/9) **BAMBER BRIDGE, Lancs.** Telephone: Preston 85271 (5 lines)



Ulster Chipboard Factory, Coleraine.

Architects: McCutcheon & Wilkinson L/ARIBA Coleraine and Ballymena.

SPANBOARD

U C

MANUFACTURED BY

THE ULSTER CHIPBOARD COMPANY LIMITED

COLERAINE, NORTHERN IRELAND

THE ONLY HOMOGENEOUS GRADED - DENSITY WOOD CHIPBOARD MANUFACTURED IN THE BRITISH ISLES

FOR FULL DETAILS APPLY:

HARRISONS & CROSFIELD LTD.

1/4 GREAT TOWER STREET, LONDON, E.C.3

THE ULSTER TIMBER COMPANY, BELFAST, NORTHERN IRELAND.

THE ARCHITECTS' JOURNAL (Supplement) May 18, 1961

Look first at NAIRN for



BROADMEAD'S 'OPERATION LIGHTNING SHOPFITTING'

SHOP: Broadmead Ltd, Edgware Road.
PROBLEM: How to install a tough new floor with a 'house-style'—at top speed.
ANSWER: Marbled white linoleum, laced with black feature strips, gives a terazzo 'house-style' effect to the entrance arcade, so that the open shop appears to extend right to the pavement's edge. Even here, completely exposed, Nairn linoleum stands up to the weather very well.
COMMENT: A blend of imagination and common sense Broadmead can—and do—lay a shop floor like this in 48 hours, typical of Broadmead (and Nairn, too).
FLOORING CONTRACTOR: THE LINO TILE CO

SHOPPING'S A WALKOVER AT INTERNATIONAL STORES

SHOP: International Stores, Croydon.
PROBLEM: Streamlined routes result in concentrated traffic—and concentrated wear.
ANSWER: Nairn linoleum in Royal Red and Blondwood, contractor-cut to make this vivid directional chequerboard. International Stores use 4.5 mm Nairn linoleum in many of their shops, and find it very hardwearing, despite the stab of female footwear.
COMMENT: In value for money, you can't beat Nairn linoleum.
ARCHITECT: W. J. LEE, LRIBA, ARICS
FLOORING CONTRACTOR: LEWIS BROS (KING'S CROSS) LTD



SMITH'S FLOOR SHOWS THE WAY

SHOP: W. H. Smith, Ealing. **PROBLEM:** To give the floor of this large shop a feeling of life and movement
ANSWER: Introduce red and black arrowheads, formed from Nairn lino tiles, to a floor of grey tiles—thus achieving a bold directional effect.
COMMENT: Keeping it simple is half the battle.
ARCHITECT: H. F. BAILEY, RIBA FLOORING CONTRACTOR: THE LINO TILE CO

NOTE: When this advertisement appeared previously, part of the floor of W. H. Smith's shop shown was inadvertently attributed to Nairn; in fact the flooring was by Bulgomme-Silence. We apologise for this error.

shop flooring–



WAITS—WHERE FOREGROUND IS BACKGROUND

SHOP: Waits, New Malden, Surrey. Wallpaper showroom.
PROBLEM: Floor must be attractive yet calm and quiet, act as foil to many different wallpaper patterns.
ANSWER: Lavender grey lino tiles by Nairn give unobtrusive background, help mood of reflection, blend with any and every design.
COMMENT: This floor contributes a lot without saying a word.

ARCHITECT: GEORGE WATT AND PARTNERS AARIBA
FLOORING CONTRACTOR: LINO-INSTALLATIONS LTD



Four shops, four problems, four solutions— with Nairn linoleum

You see here four widely different shops: a fast-moving, hard-selling, electrical goods shop; a quiet and dignified wallpaper showroom; the browse-worthy record bar of a bookstore; and a streamlined supermarket. In each case, the floor poses a different problem—and in each case Nairn linoleum provides the solution.

A LONG LIFE—AND A CLEAN ONE

You'll see the detailed hows and wheres of these solutions beside each picture. The two big reasons why so many architects specify Nairn linoleum for shop floors are its long life and its ease of maintenance. Nairn linoleum is extraordinarily hardwearing: one store laid Nairn lino tiles at the head and foot of its escalators four years ago, and today—forty million hard-walking customers later—the floor is still in good condition. When it comes to maintenance costs, Nairn linoleum can save you up to one third as against thermoplastic floors.

WHAT YOU GET

You get a lot for your money when you specify Nairn linoleum. You get good looks with long life; you get economy with versatility; you get colour with strength. That's why it pays to look first at Nairn linoleum for shop flooring . . . or, indeed, any other.

NOW NAIRN HELPS THE ARCHITECT

You can quickly get skilled advice and information on any floorcovering—not only linoleum—from your nearest Nairn technical representative. Phone, call or write.

NAIRN linoleum

LONDON · BIRMINGHAM · MANCHESTER
GLASGOW · KIRKCALDY

DESIGNS IN CONCRETE 11



Chartered Architects: Barker & Jordan
Contractors: L. & W. Morrell Ltd.

NORTH EASTERN GAS BOARD

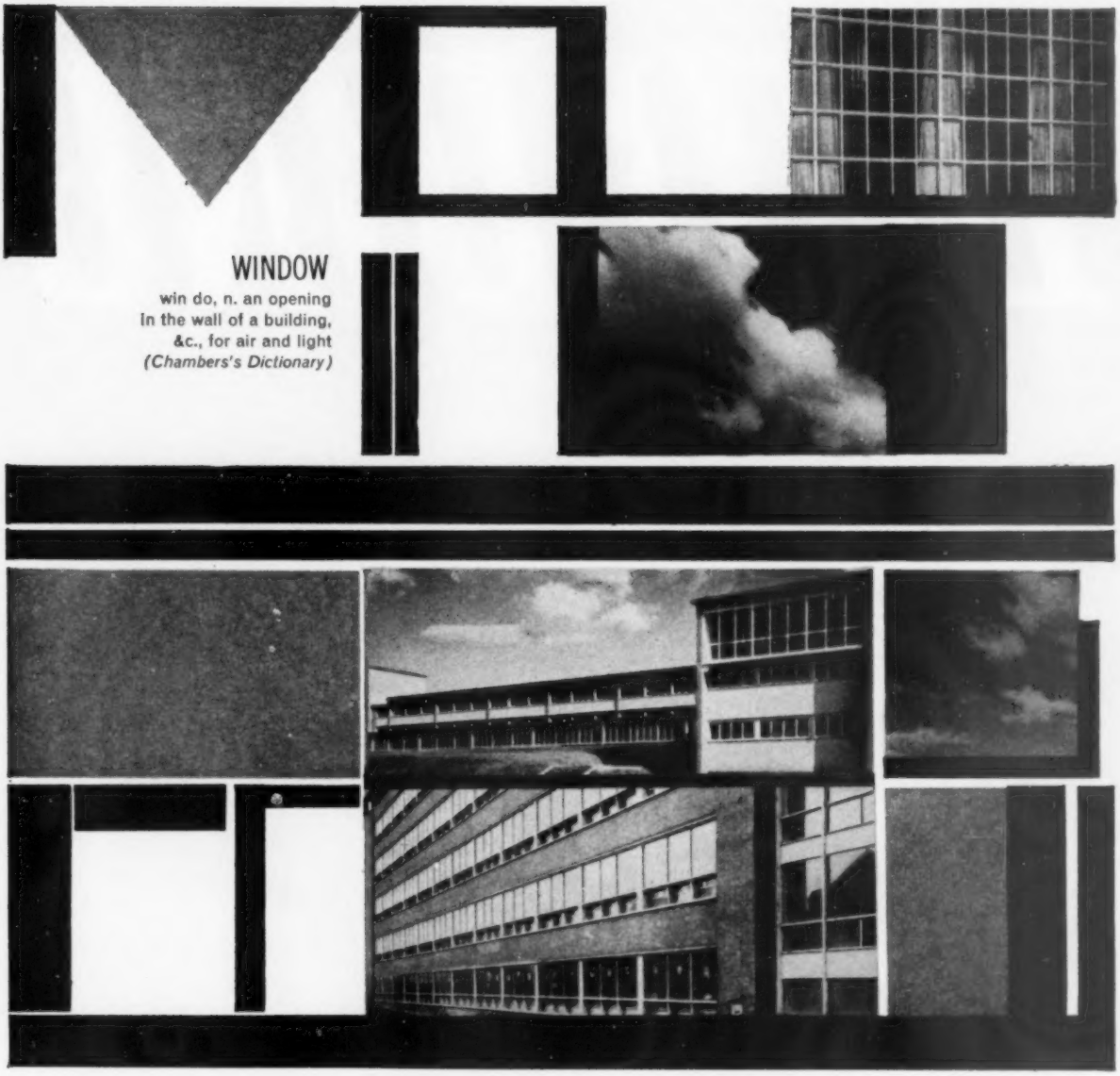
The North Eastern Gas Board decided to concentrate their office accommodation. Part of this was previously in the area designated for re-development.
The New Office Block abuts up against the existing premises. It stands on a corner, and therefore, fronts on to two streets. The whole of the Block has a Pile foundation.
Although designed for three storeys, only two storeys are built on one elevation, and provision has been made, by means of stub columns, for this to be extended in a vertical direction, when the additional accommodation is required.
Under part of the two-storey structure, a basement has been formed for the storage of Refrigerators and Cookers.
The main entrance has a distinctive stair-case, and leading off, are the two Administrative wings. The whole of the building is an insitu Reinforced Concrete frame.
The elevation consists of facing brick-work and Westmorland slate.
Parts of the concrete frame to the main entrance have a mosaic finish.
The first floor, and subsequent floors of the three-storey block cantilever out at first floor level.

If you want to put steel into concrete
get in touch with

G.K.N. Reinforcements Ltd.

7 Oxford Road, Manchester 1. (Ardwick 1691)

SMETHWICK *Smethwick 2111*
LEEDS *Leeds 27311* CARDIFF *Cardiff 35220*
MIDDLESBROUGH *Middlesbrough 3843*
LONDON *Chancery 1616*
GLASGOW *Bell 2444* BRISTOL *Bristol 21555*
SOUTHAMPTON *Southampton 22167*
LEICESTER *Leicester 25114*



WINDOW

win do, n. an opening
In the wall of a building,
&c., for air and light
(Chambers's Dictionary)

THE *Braby* DEFINITION

a metal-and-glass unit designed for precise architectural needs, made with care, delivered with speed.

The range of Braby Metal Windows in steel and aluminium will meet with exactness all demands you make.

Other Braby metal components for the Architect include metal partitions; copper, zinc and aluminium roofing; aluminium and steel curtain walling; pressed-steel internal stairs; fire escape stairs and pressed-steel door frames.

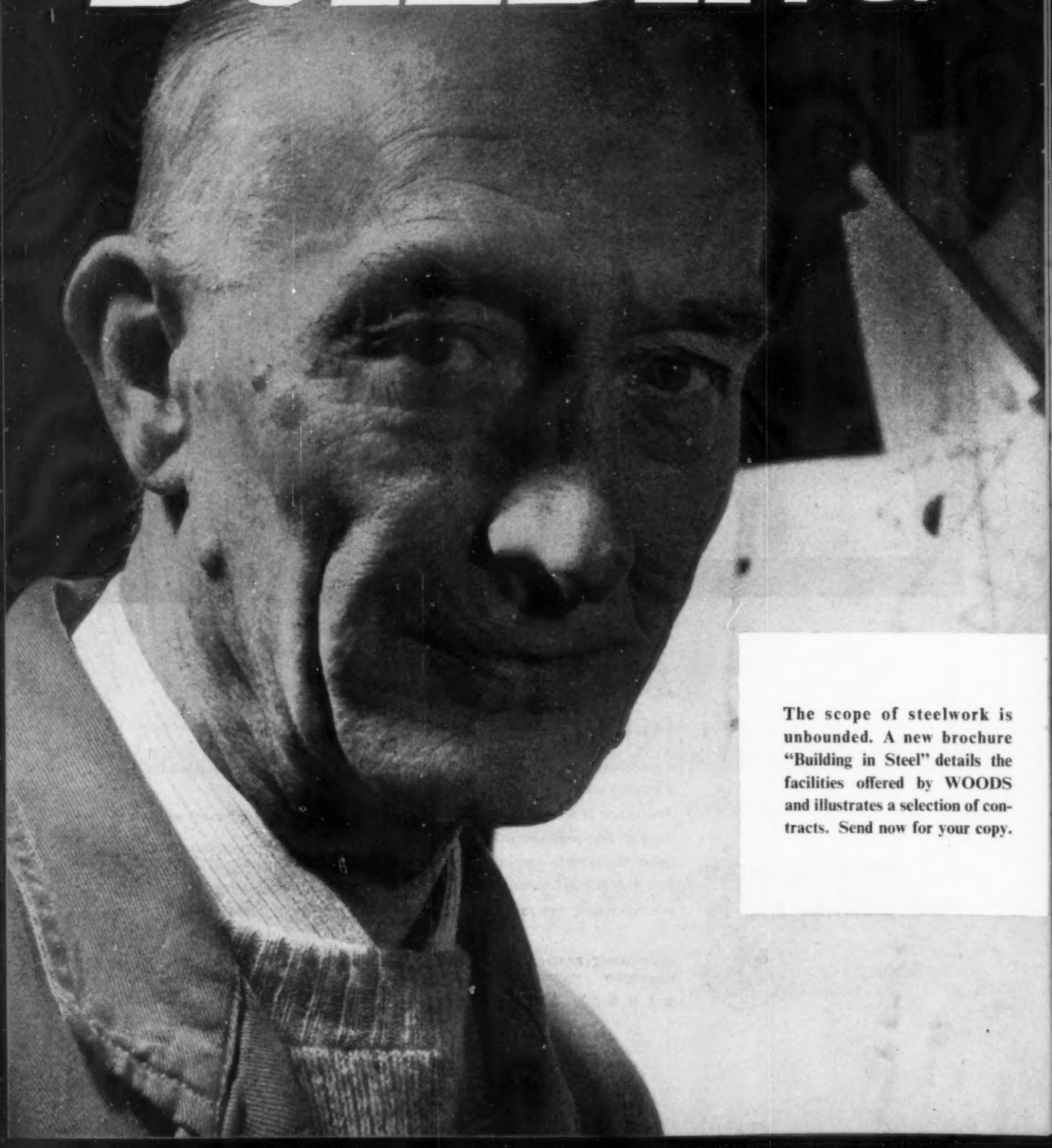
ARCHITECTURAL DIVISION
FREDERICK *Braby* & CO LTD

HEAD OFFICE : BRABY HOUSE, SMITHFIELD STREET, LONDON, E.C.1 TELEPHONE : CENtral 2388
CRAYFORD LIVERPOOL GLASGOW BRISTOL BELFAST PLYMOUTH
MEMBER OF BRABY OF BRITAIN GROUP

AP 212

THE ARCHITECTS' JOURNAL
(Supplement) May 18, 1961

BUILDING



The scope of steelwork is unbounded. A new brochure "Building in Steel" details the facilities offered by WOODS and illustrates a selection of contracts. Send now for your copy.

IN STEEL

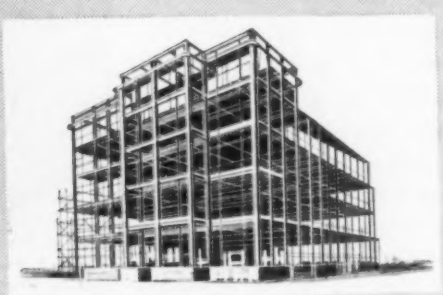
the people who count

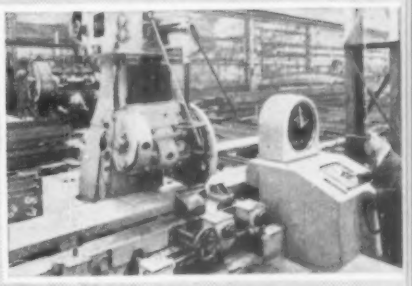
There's an air of quiet confidence about Fred Slater. He's been at Woods for forty-three years, leads a squad of template makers and, as Works Committee Chairman, has helped to improve production methods and welfare. His father worked for the Company, a brother and cousins are also Woods' men. To Fred Slater, Woods are more than just employers. That's as it should be. Such qualities as craftsmanship, enthusiasm and service are invaluable in maintaining the very high standard of steel construction with which the name of Wood is always associated.

EDWARD WOOD & CO LTD

CONSTRUCTIONAL ENGINEERS

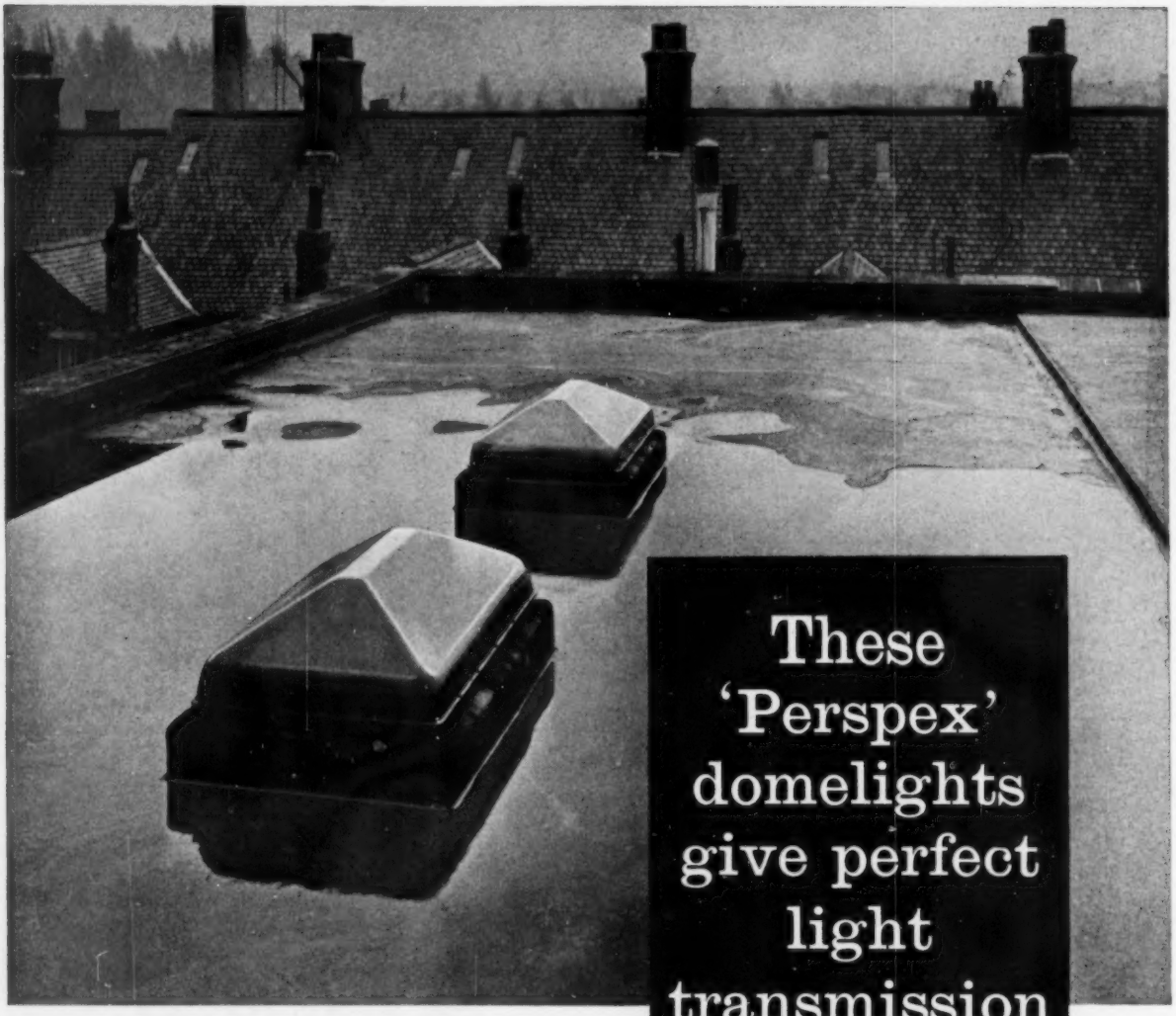






Registered Office and Works:
OCEAN IRONWORKS · TRAFFORD PARK · MANCHESTER 17

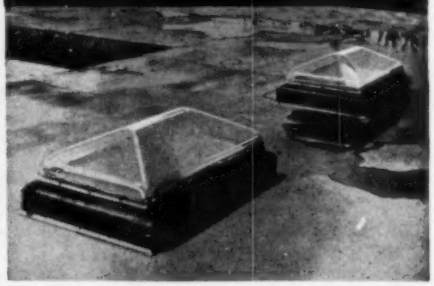
Tel: Trafford Park 2341 (10 *lines*)
London Office:
78 *Buckingham Gate, S.W.*1
Tel: Abbey 1948/9



These 'Perspex' domelights give perfect light transmission after 12 years

THESE domelights were installed on the roof of Sports Hosiery Limited, Leicester in 1948. As the top photograph (taken in March 1960) shows, weather and the city atmosphere have not affected them at all. They still maintain their high light transmission—a characteristic of 'Perspex' acrylic sheet, from which they were made.

'Perspex' has other advantages besides its excellent optical properties. It is mechanically an easy material to work with, being both light and strong, easily shaped and obtainable in various forms including a range of opals of differing degrees of diffusion. 'Perspex' is, in fact, the ideal material for domelights—and it *lasts*.



'Duplus' domelights made from 'Perspex' acrylic sheet by Duplus Domes Ltd., Chatham St., Leicester. This photograph shows the domelights when first installed at Sports Hosiery Limited, Aylestone Park, Leicester in 1948. Top photograph taken March 1960.

'PERSPEX'

'Perspex' is the registered trade mark for the acrylic sheet manufactured by I.C.I.

P804

IMPERIAL CHEMICAL INDUSTRIES LIMITED · LONDON · SW1



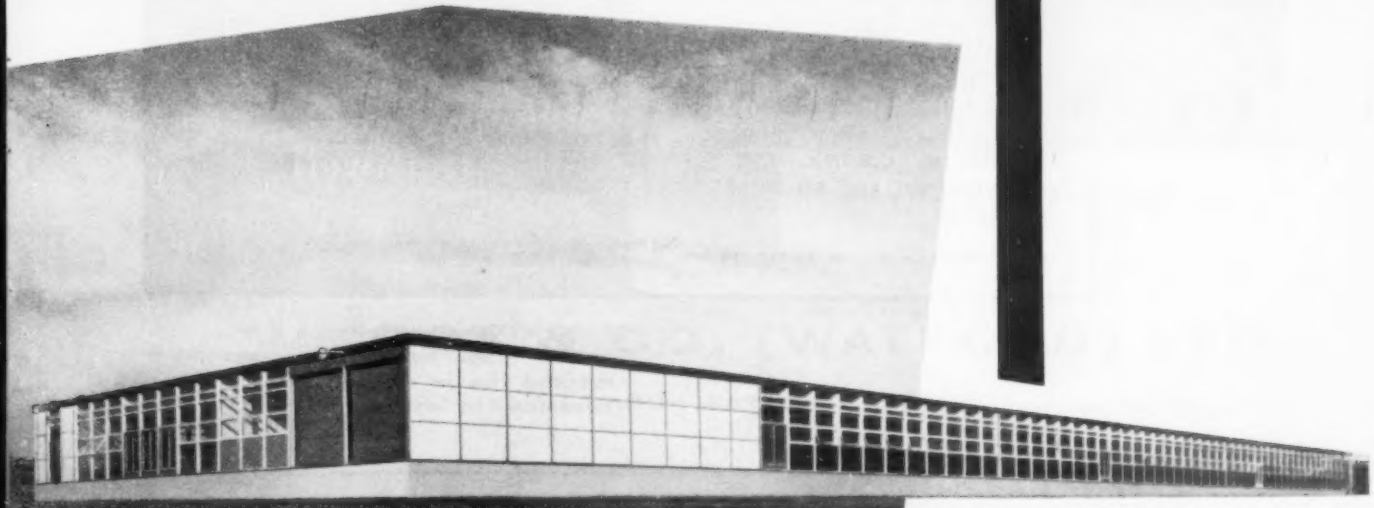
VIC HALLAM LTD

TIMBER BUILDINGS DIVISION
LANGLEY MILL · NOTTINGHAM
TEL: LANGLEY MILL 2301/9

a need to expand quickly and economically

Foister, Clay and Ward Ltd., hosiery manufacturers, were faced with a major factory expansion programme. Architect, D. A. Matthews, A.R.I.B.A., was called in for consultation. A one acre factory was to be built accommodating 400 operatives, with canteen and storage facilities. After discussions with Vic Hallam Limited, they decided to build in the new TYPE 6 system of construction and, within six months, the factory was producing for both home and export markets. New TYPE 6 offers the industrial architect planning flexibility at low cost, fast erection and a reduction in time spent during design stages.

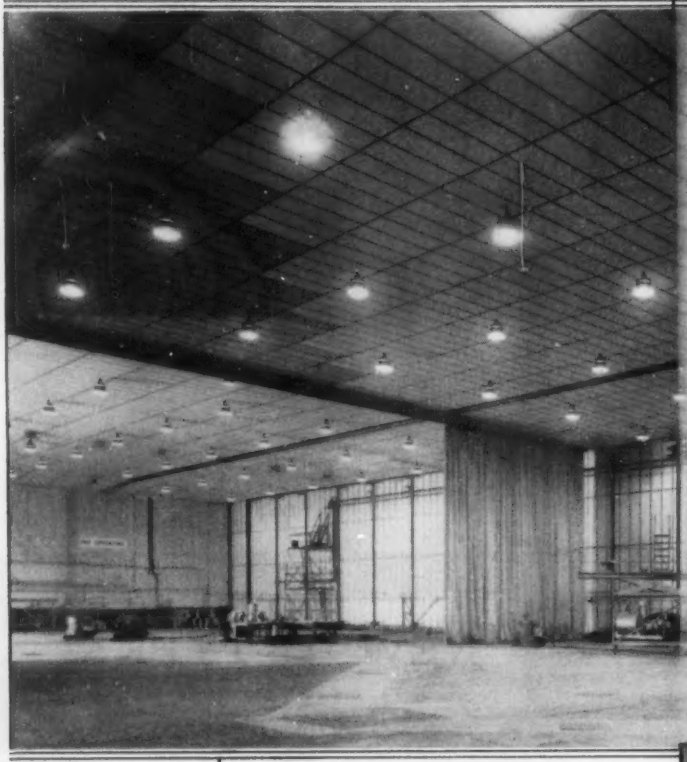
NEW TYPE 6 FACTORIES



Factory at Mansfield—
Foister, Clay and Ward Ltd.
Architect—D. A. Matthews,
Dip.Arch., A.R.I.B.A., Leicester.
General Contractor—
A. A. Stuart & Sons (Glasgow) Ltd.

YOU CAN DEPEND ON IT

STRUCTURAL
THERMAL INSULATION
DOES SAVE
UPWARDS OF
50%
HEATING COSTS
WITH
VASTLY IMPROVED
WORKING CONDITIONS



THE HEYWOOD-HELLIWELL SYSTEMS OF FIXING STRUCTURAL THERMAL AND ACOUSTIC INSULATION ARE DESIGNED TO PROVIDE A FUNCTIONAL SERVICE WHICH COMPLETELY JUSTIFIES THE STANDARDS AND PURPOSE OF GOOD INSULATING MATERIAL.

CAPITAL COST OF INSTALLATION CAN BE RECOVERED IN 3 TO 4 YEARS.

CUT	YOUR FUEL COSTS
REDUCE	PRE-HEATING REQUIREMENTS
INCREASE	HEATING PLANT EFFICIENCY
AVOID	CONDENSATION PROBLEMS
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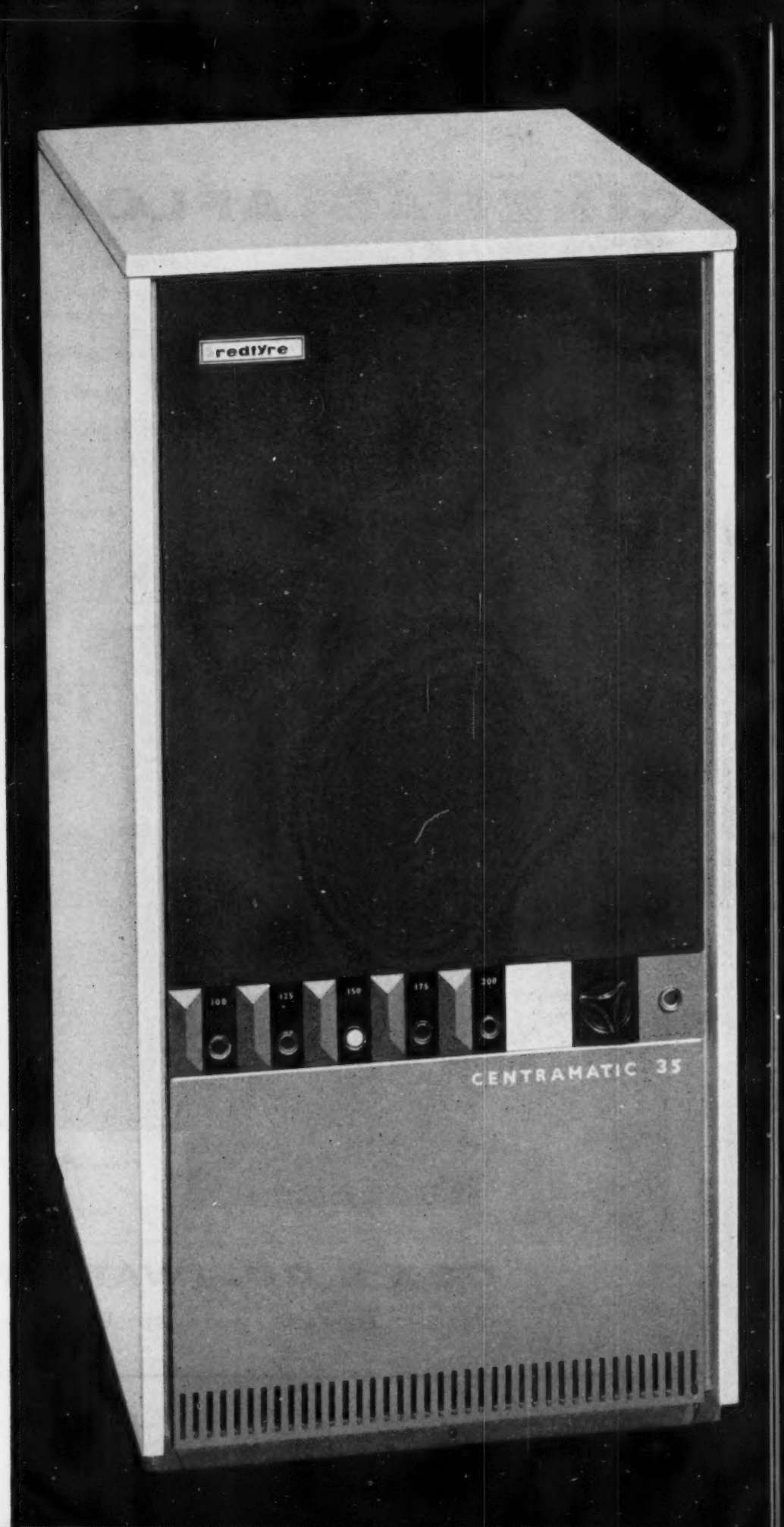
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REDFYRE CENTRAMATIC 35*

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- **SIZE AND STYLE** . . . specially designed to fit into the smallest kitchen. The front panel is available in a wide range of two tone colours. *The judges preferred the natural anodised aluminium panel.
- **AUTO-CONTROL SYSTEM**...The 35 warms the radiators and heats the water automatically. Indicator lights act as a constant reminder of the temperature selected and the boiler is automatically operated at this setting by a sealed printed circuit control unit. When the correct temperature is reached, the boiler switches itself off.
- **FUEL ECONOMY**. . . Exceptional! The patent burner in the 35 has electric ignition: it lights itself and reaches full operating efficiency almost at once. No pilot flame or low-pressure "idling" to dribble away the fuel wastefully.
- **AUTOMATIC COMBUSTION**...The 35 does not rely on a good constant chimney draught to provide air for correct combustion. The fan on the unit does this and a 5" diameter chimney flue (top or back outlet) with some updraught is all that is needed.

FACTS AND FIGURES

Construction — vertical cylindrical water tube boiler made from heavy gauge mild steel with large diameter flow and return tappings, catering for gravity hot water circulation as well as small bore.

Burner Unit — patent burner incorporating electric ignition. Combustion air supplied by a co-axial fan. Burner works only at "high fire" or is "off".

Subsidiary Controls — flue thermostat and electric oil control valves and built-in automatic safety features including thermal fuse fire and valve "lock-out" device.

Tappings—four 1¾" B.S.P. tappings.

Electrical Supply — A.C. only, 200-250 v. 50 cycles, consumption 35 watts.

Output — 35,000 B.Th.U's/hr. continuous rating (water transfer). Suitable for supporting, for example, a 30 gallon indirect domestic hot water cylinder plus 130 sq. ft. of radiator surface (including service pipe). If used for heating radiators only, 200 sq. ft.

Fuel—The recommended fuel is B.P. Domestical. The Centramatic 35 can give a full heating service in a small house for less than £1 a week averaged throughout the year. Running costs depend largely on the size of the house, its insulation, and the temperature requirements.

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Atlas Major Span Sheeting is designed for purlins spaced at 6 ft. 6 in. centres. Fewer purlins are needed. Erection time and costs are cut substantially. For roofing that looks better, and is proof against the worst weather, use Atlas Major Span Sheeting. Write or telephone for descriptive leaflet.

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By adopting the 21″ module, Vanson achieves within the 21 range an almost unlimited number of designs from a few basic components. Quality is high: prices, low.

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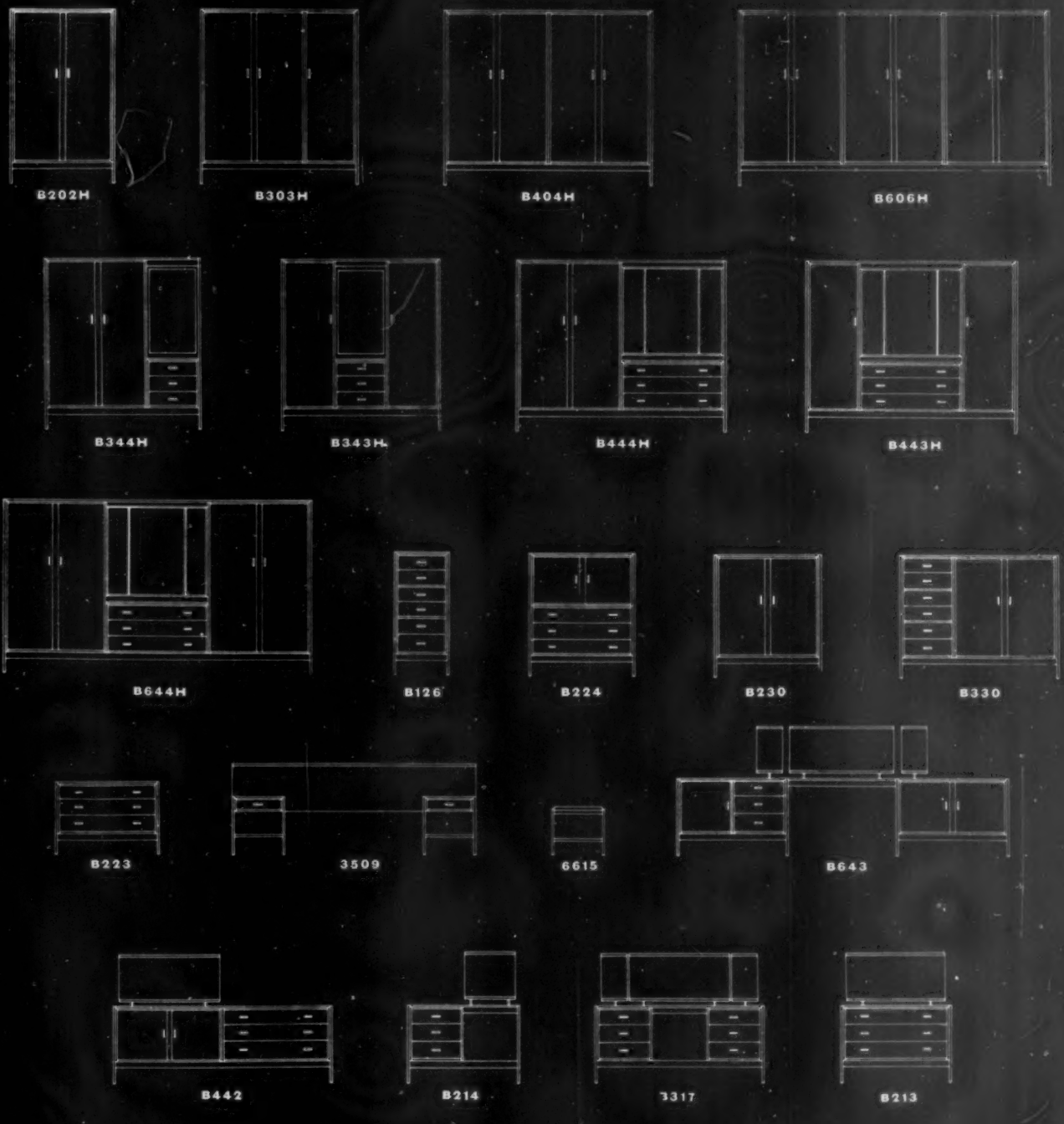


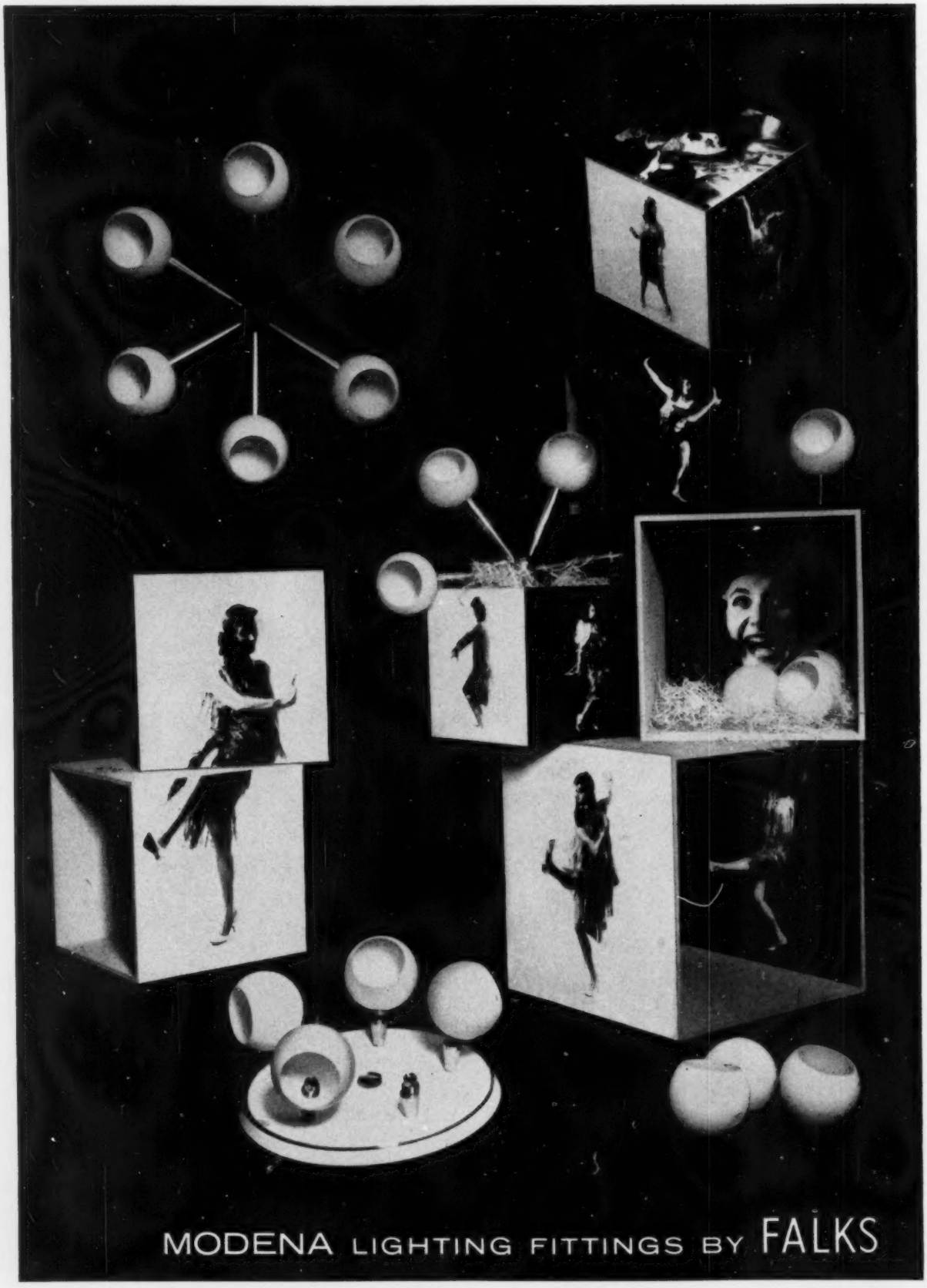
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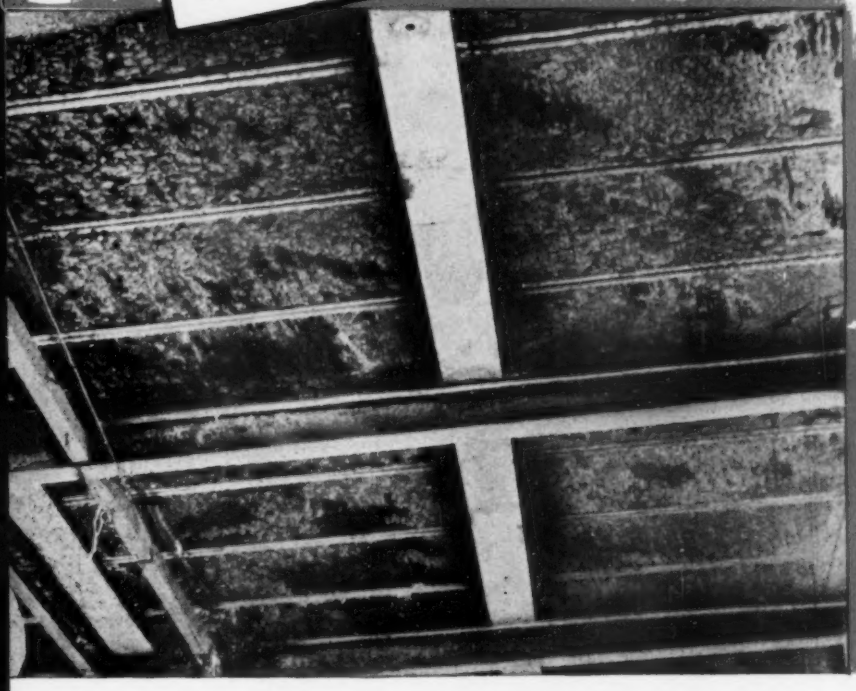
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—have been tested by the D.S.I.R. & F.O.C. Joint Organisation and fully satisfy B.S. 476 : Part 3 and B.S. 475 : Part 1 for fire commencing externally and internally. Copies of test reports available on request.
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—fully satisfy the Spread of Flame and Thermal Insulation requirements of the 1957 Act.
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If you can dig the trench, you can lay the drains — when you use Key Pitch Fibre Drainpipes. There's no concrete bed or haunch, and the joints are driven dry. The job is quicker, the site is cleaner, and the cost is lower.

Add a soil and waste layout in Key, with Key-Conex waste connectors fitted into the erected stack, and the saving on that item alone averages 50%. Specify Key and put drainage problems out of mind as well as out of sight.

other KEY advantages are

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DEPENDABILITY Every length of Key Pitch Fibre Drainpipe bears the British Standard 'Kite' mark and is the product of 60 years' experience in pitch fibre.

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NOTE THE EASE OF FITTING No tools are necessary for fitting the assembly to leading makes of pan, as the hinges are adjustable.



Shires also make the 'Lynx' cistern and 'Uni-Lynx' close-coupled suite.

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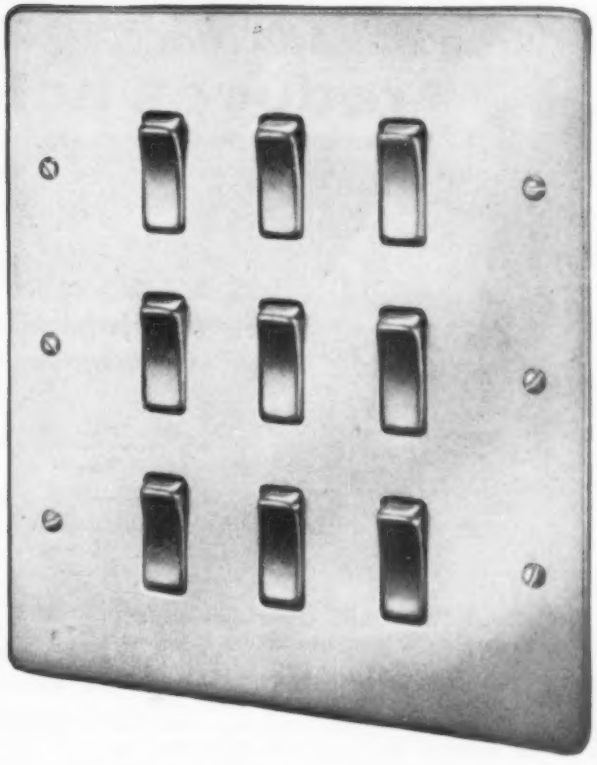
The switch with the modern touch

WEMPRESS

In harmony with today's designs for living is the WEMPRESS, the switch that operates at the lightest touch. The WEMPRESS is elegant yet unobtrusive in appearance, smooth but precise in action. A metal rocker replaces the conventional dolly for easy, silent operation. Carrying a tray into an unlit room? Simply nudge the WEMPRESS with your elbow or shoulder . . . the room is lit. Made for 5 or 15 amps. loading.

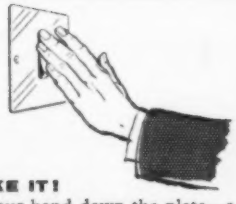
MANY ATTRACTIVE FINISHES

The WEMPRESS can be supplied for flush or surface mounting, with brass or aluminium plates in a choice of delightful finishes—coinage bronze, satin chrome, pastel silver, nickel bronze, electric red, clover pink or leaf green, etc., etc.

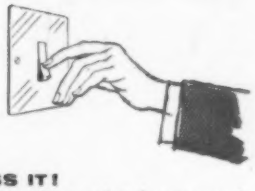




NUDGE IT!
The WEMPRESS will obey your touch—instantly—on the lightest pressure.



STROKE IT!
Brush your hand down the plate—a gentle click and the WEMPRESS operates quietly and efficiently.



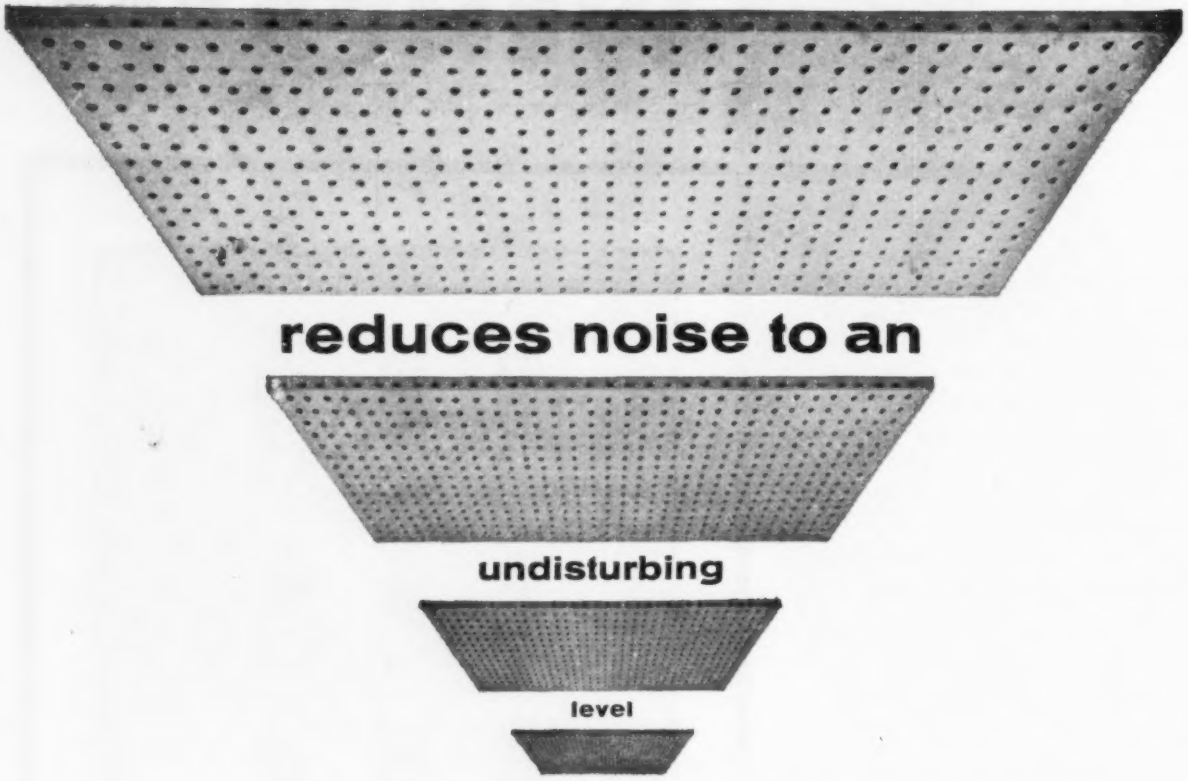
PRESS IT!
—lightly. The action is so smooth and precise that only the minimum of effort is required.

Wandsworth

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PAXBOARD weighs less than 1-lb./sq. ft. and the larger than normal acoustic board size renders erection cheaper and more convenient.

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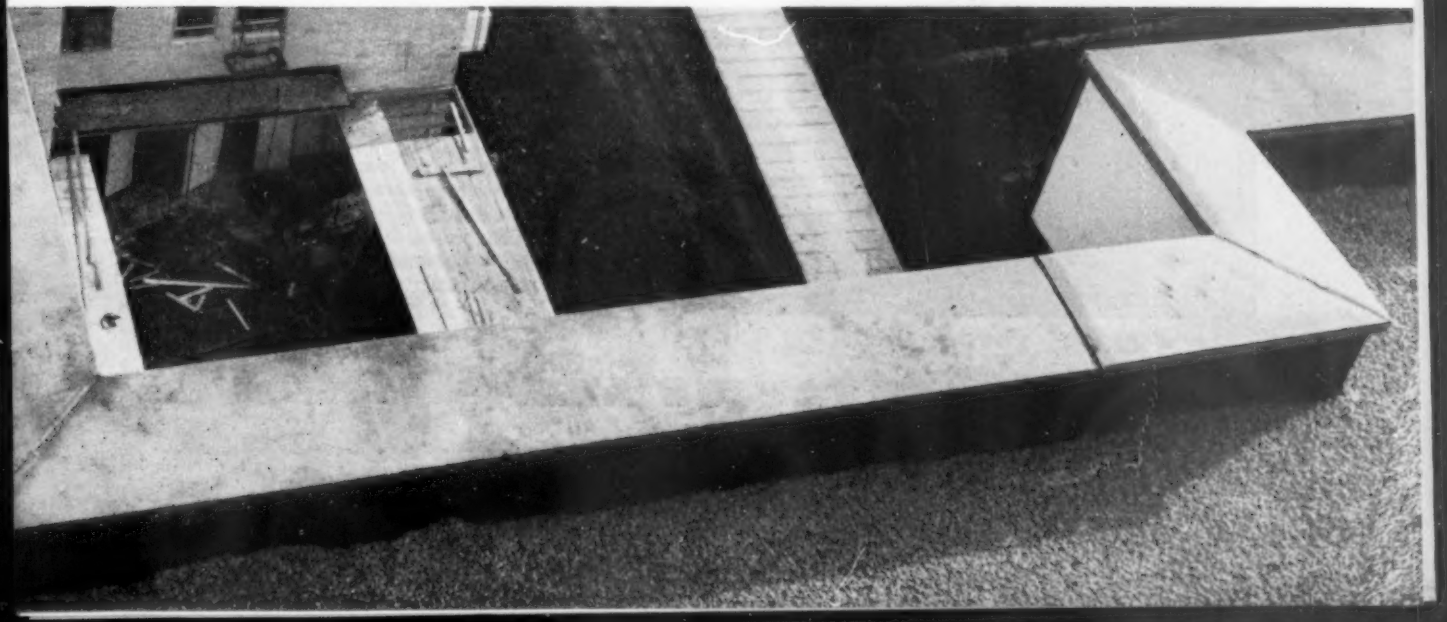
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54

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six sided argument



Any organisation professing a specialist knowledge of timber preservation must provide a genuine service in which the diagnosis, the method of treatment and the preservative used can all be accepted by the architect or the client in good faith. The argument for the Xylamon service is six sided — and guarantees a cure for at least 20 years.

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Produced by the largest timber preservative research organisation in Europe, Xylamon has a three-way toxic action combining contact, stomach and fumigant insecticides. It drives deeply below the surface and becomes an integral part of the timber itself. Once applied it destroys *any* wood boring pest or fungus which attempts to attack the timber.

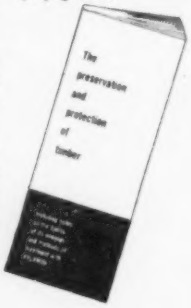
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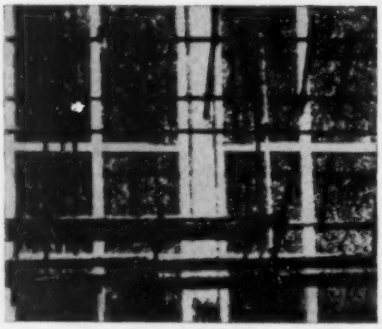
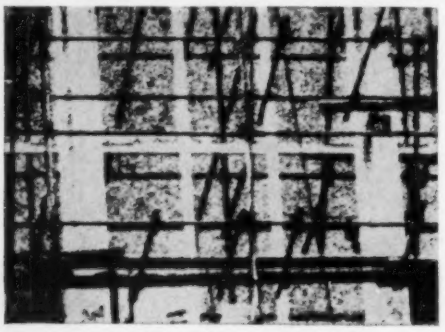
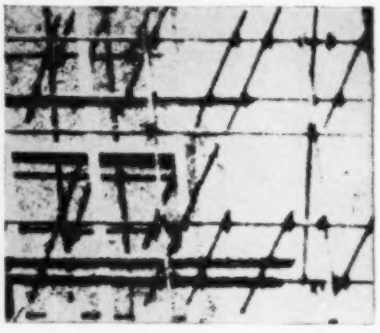
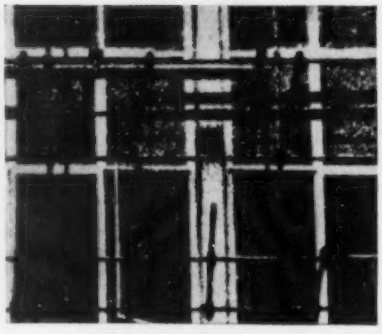
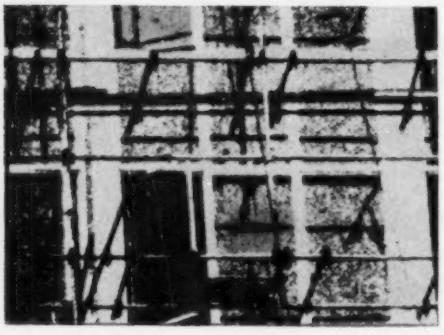
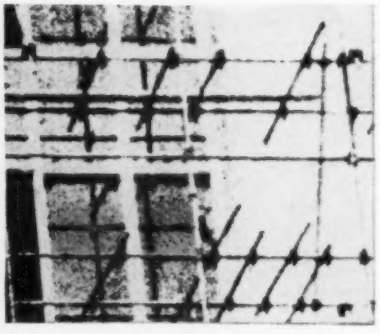
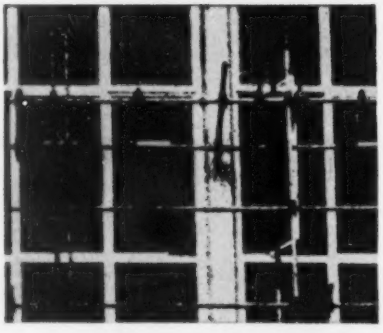
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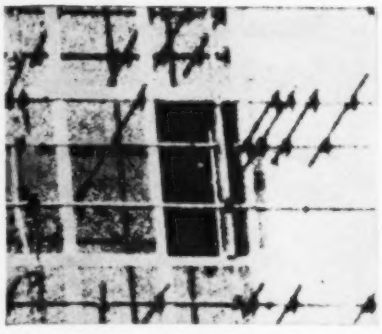
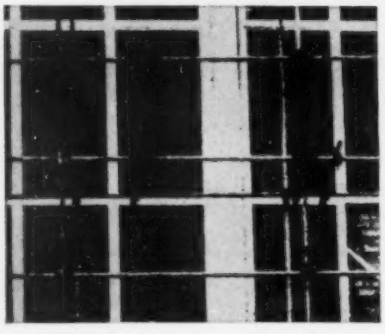
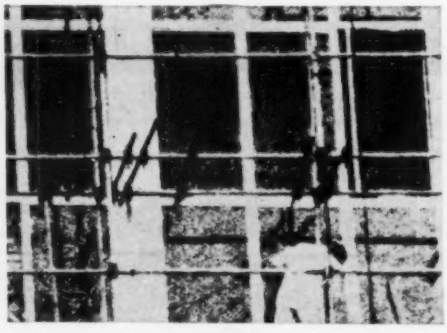
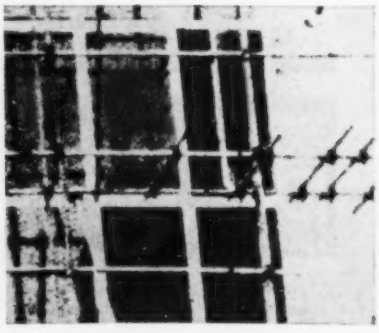
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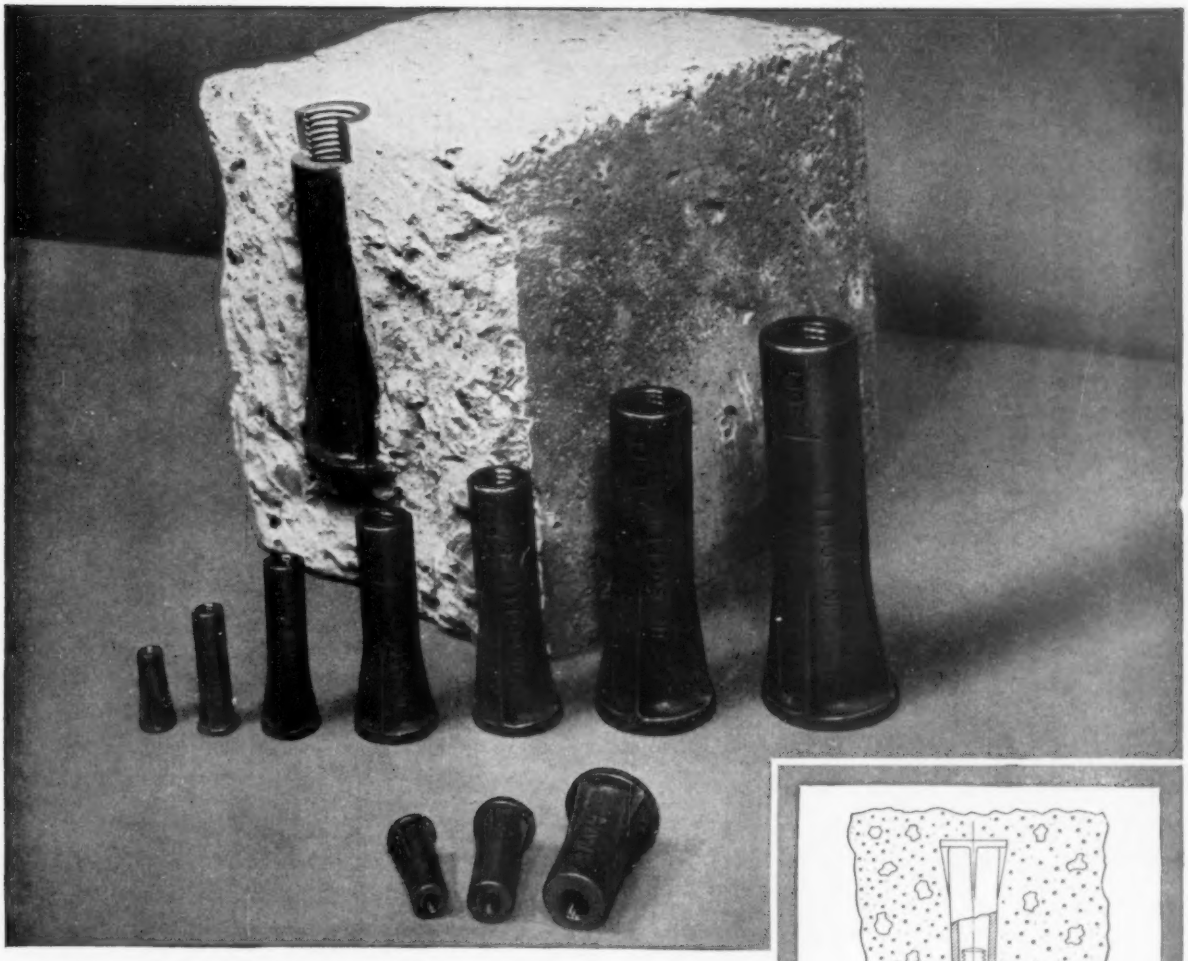
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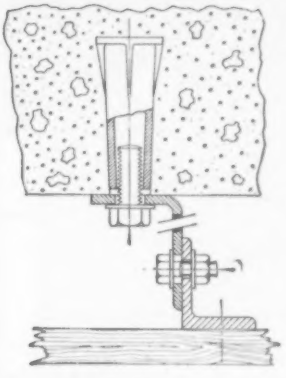
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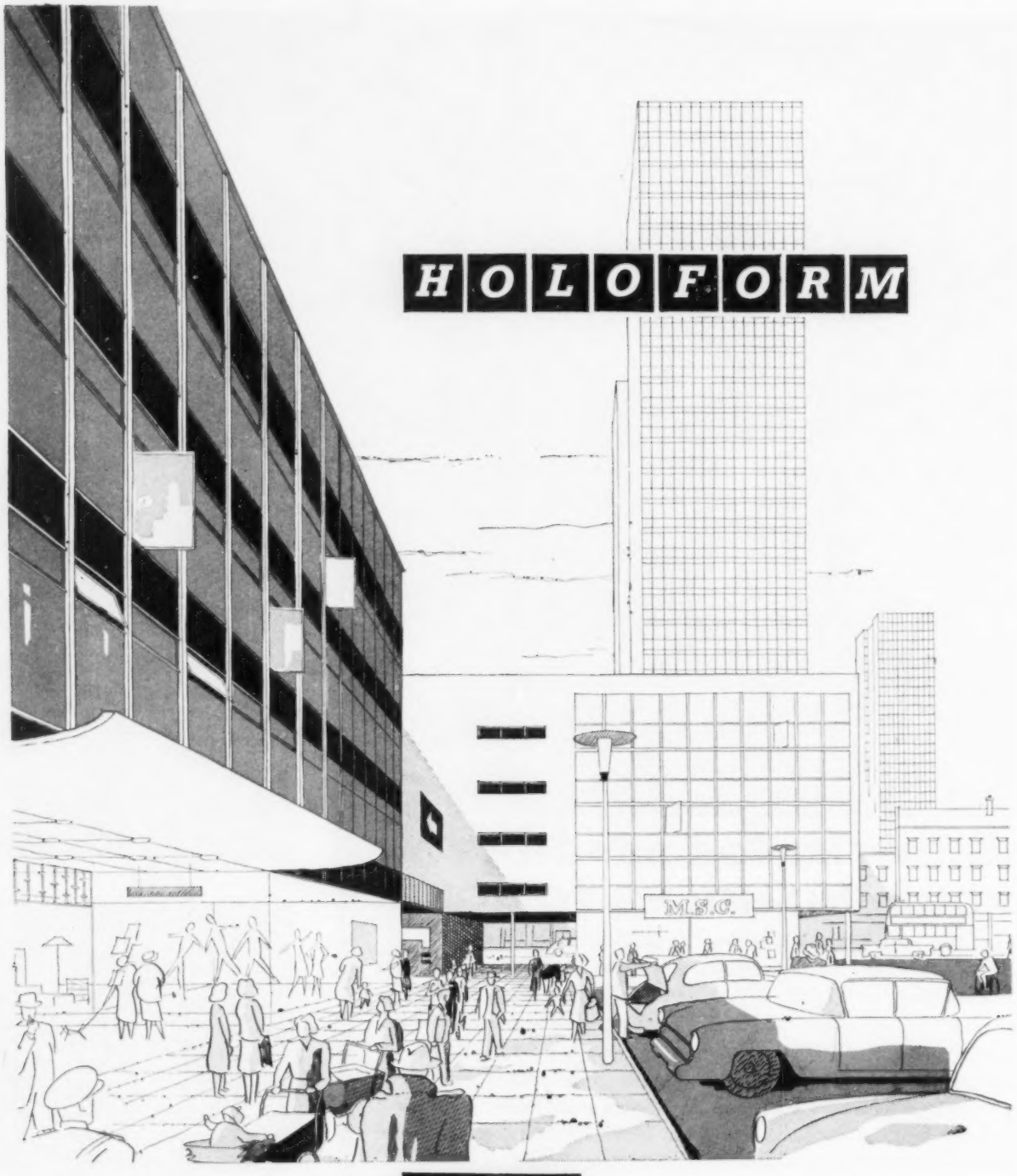
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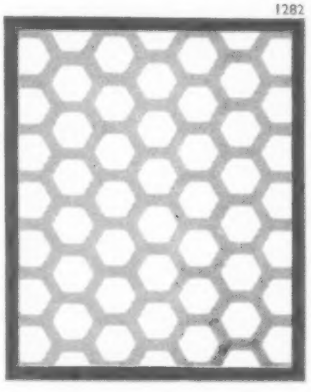
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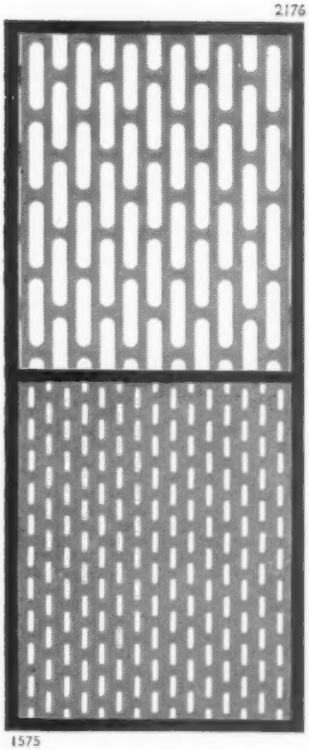
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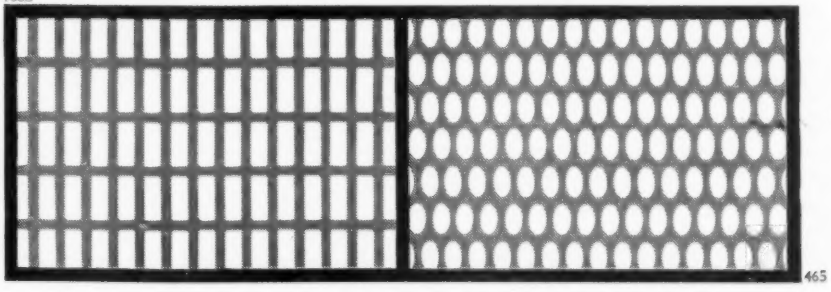




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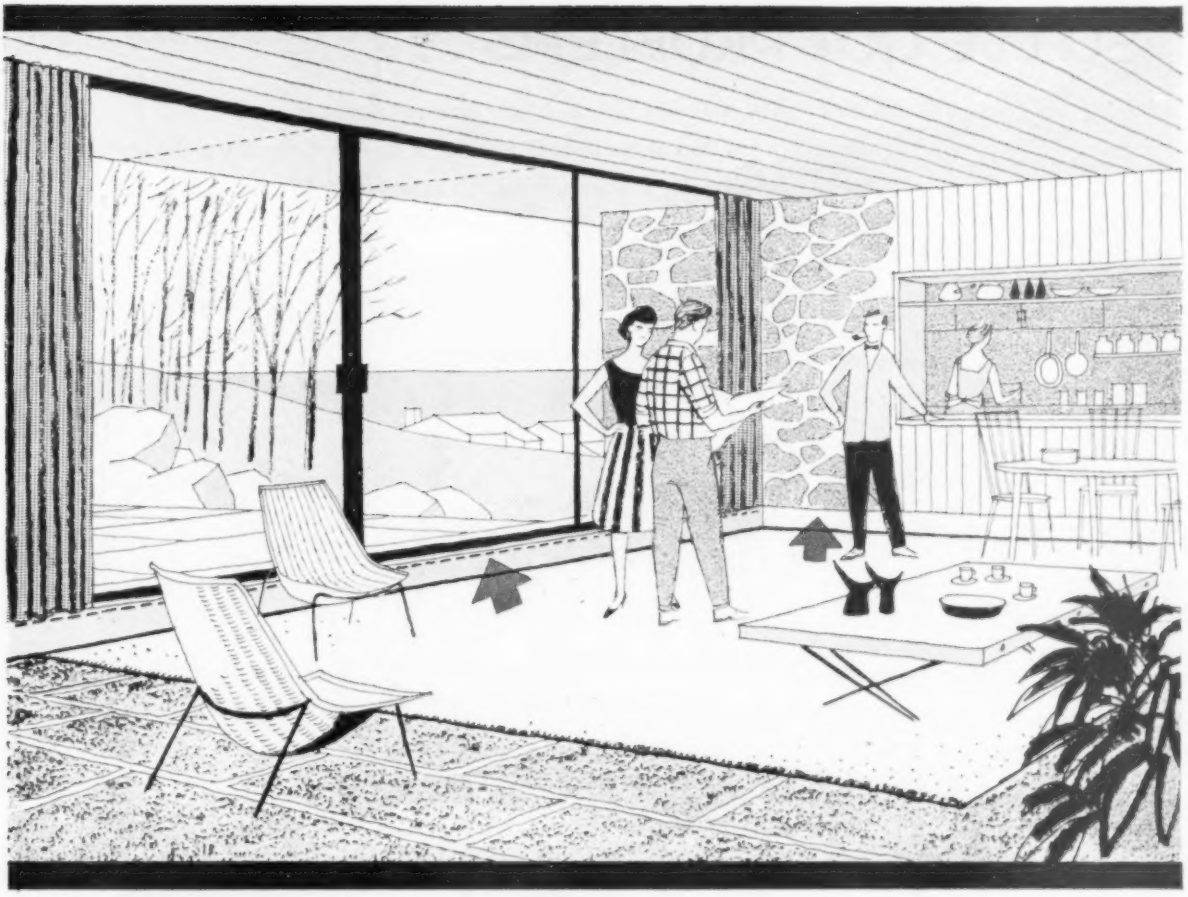
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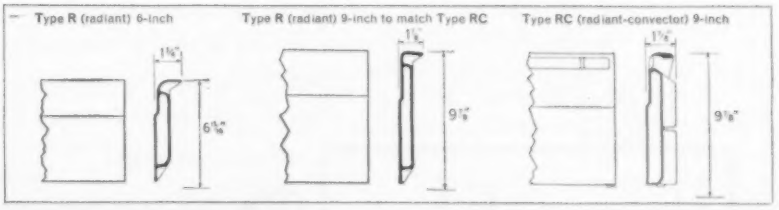
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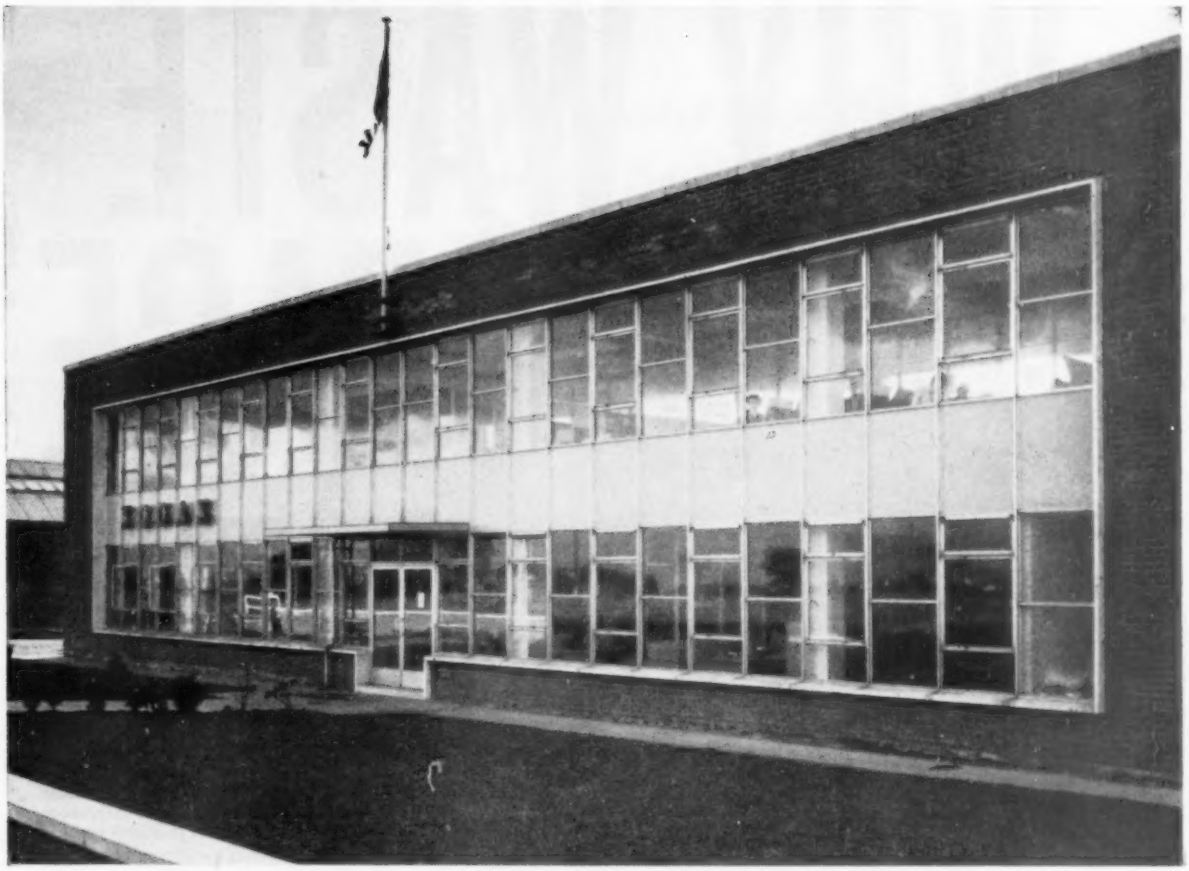
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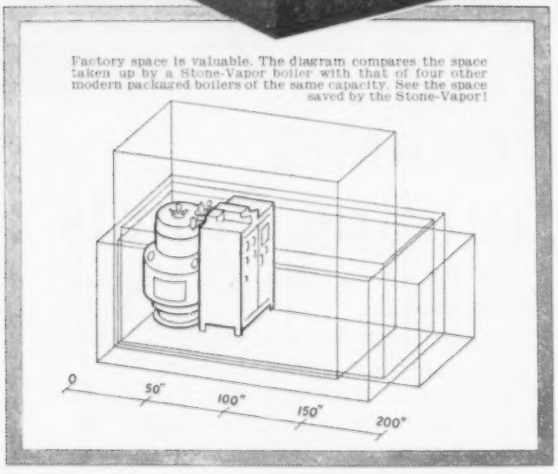
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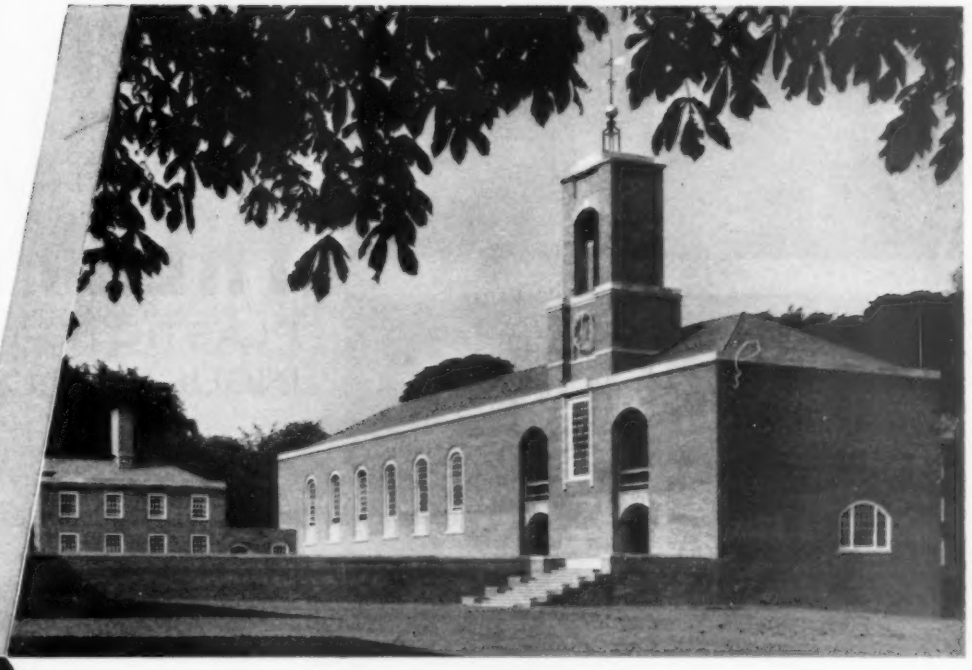
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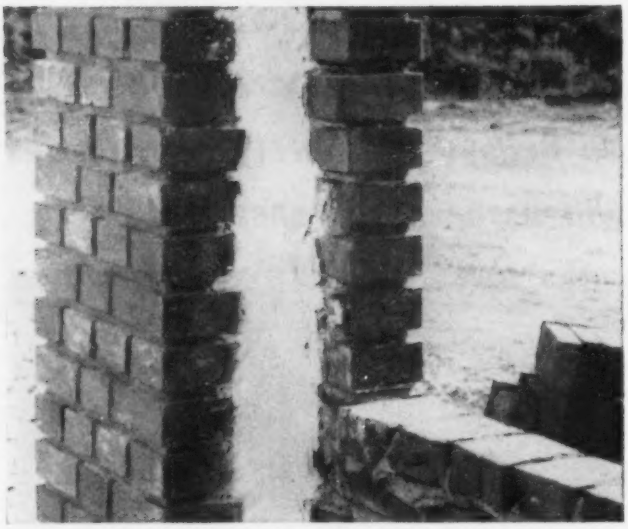
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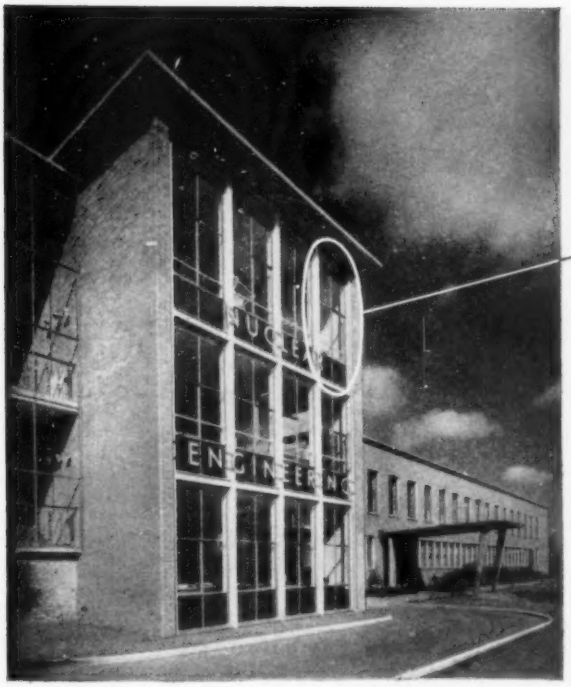
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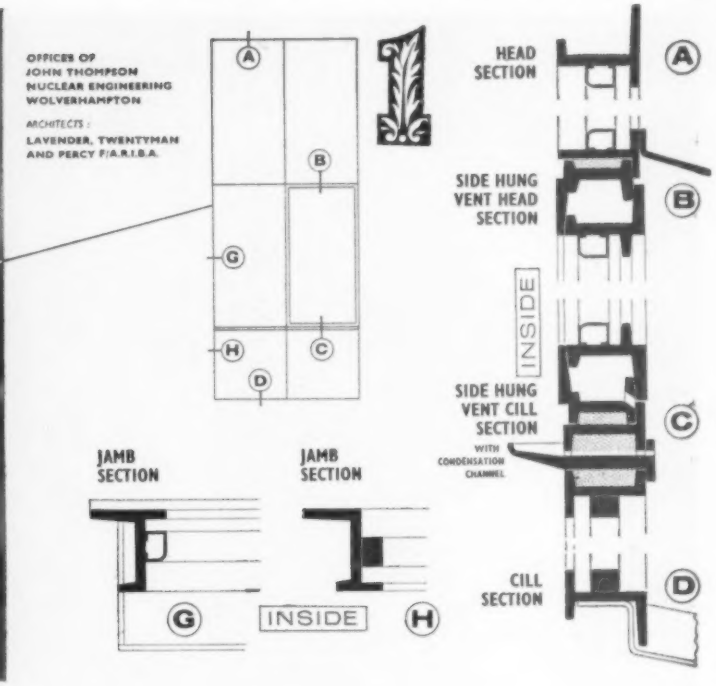
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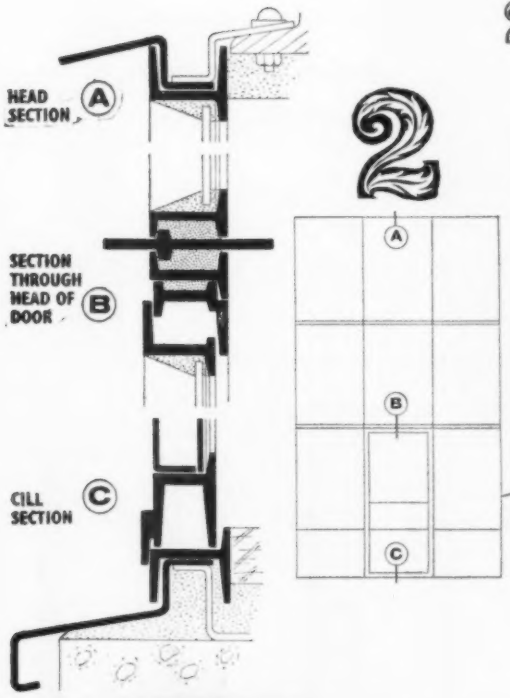
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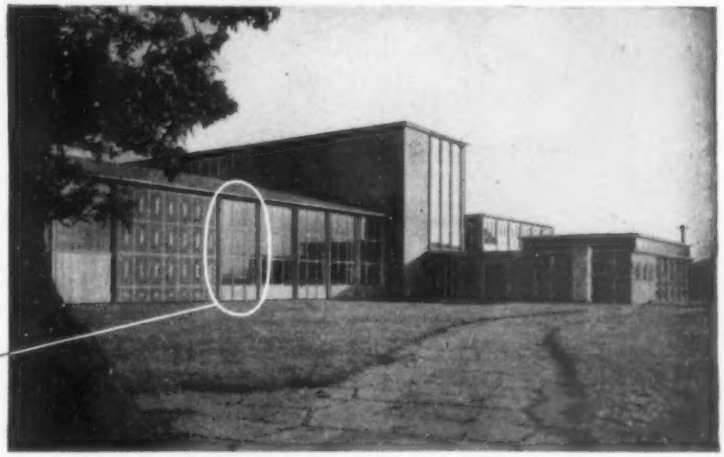


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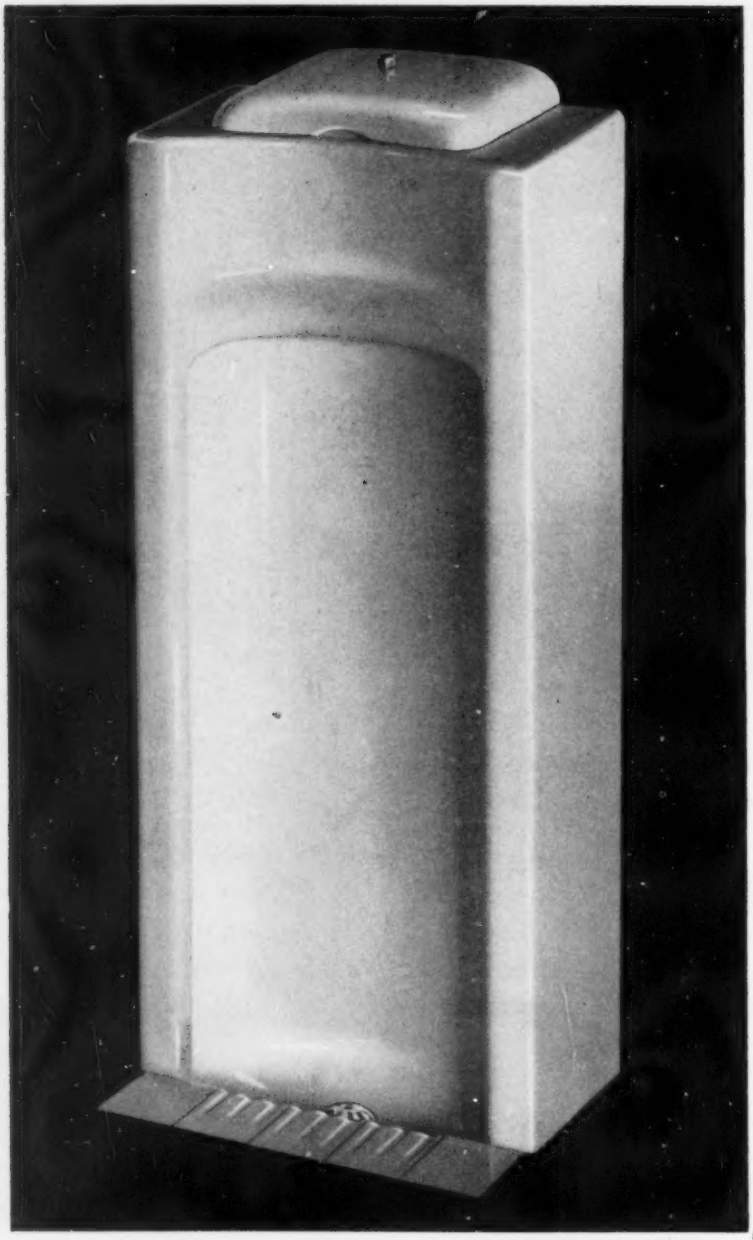


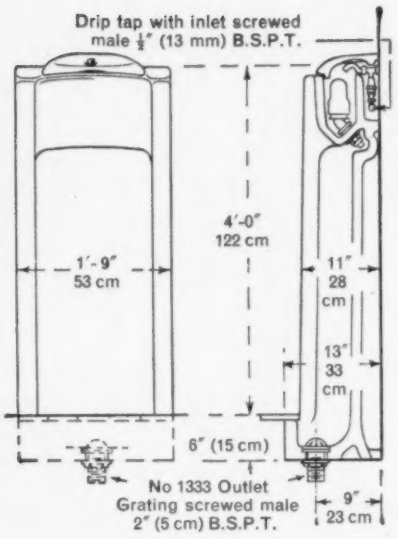
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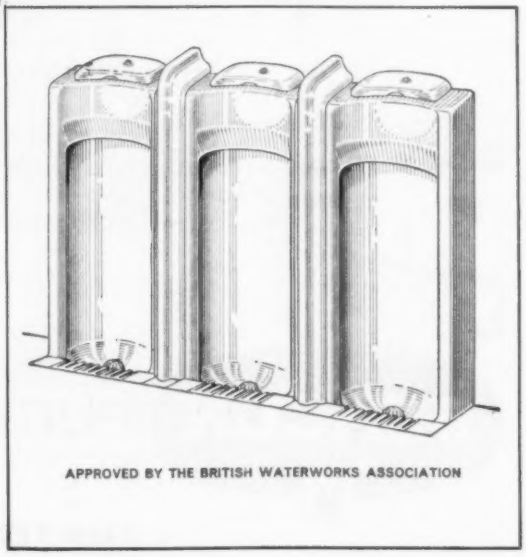
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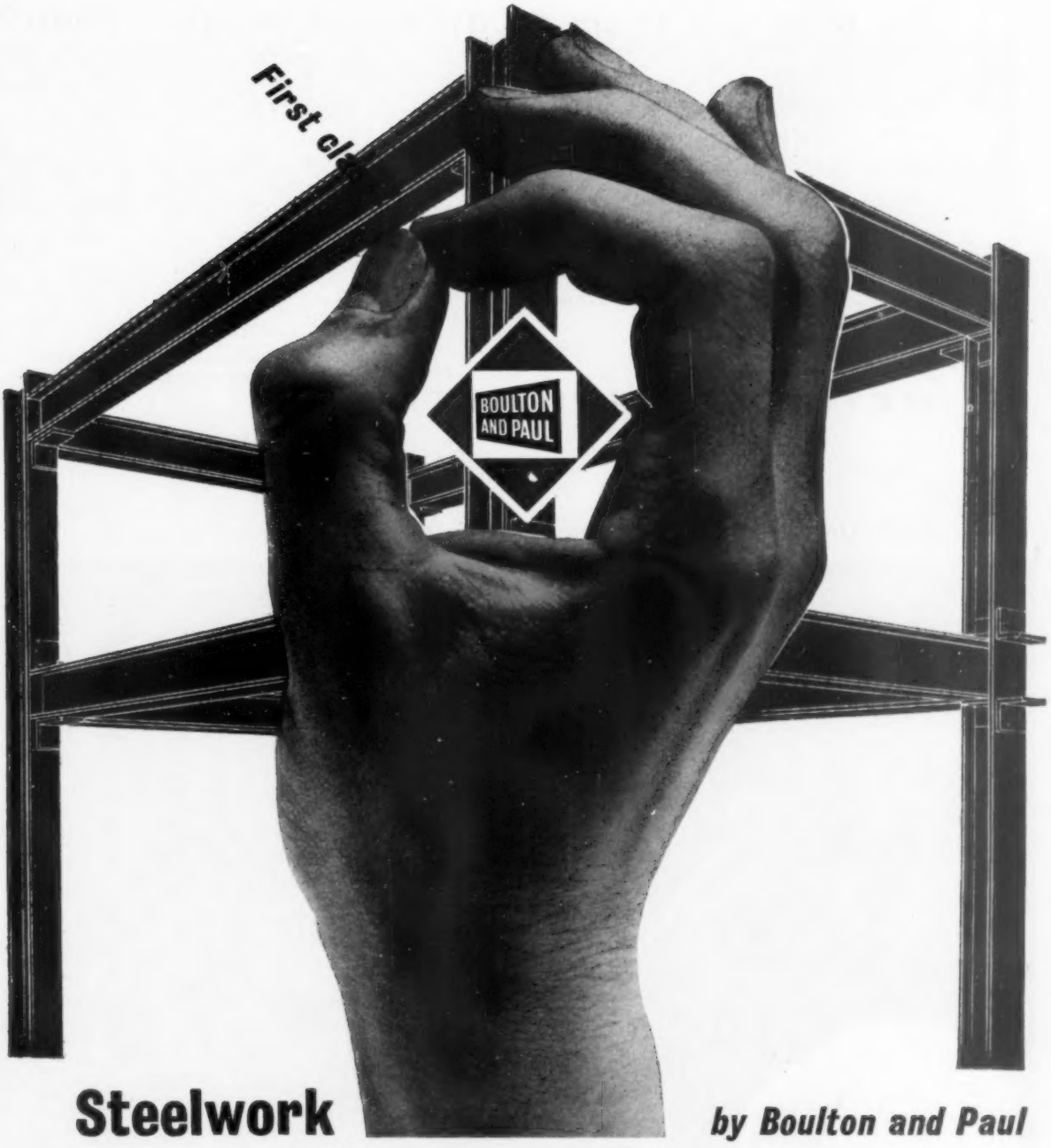
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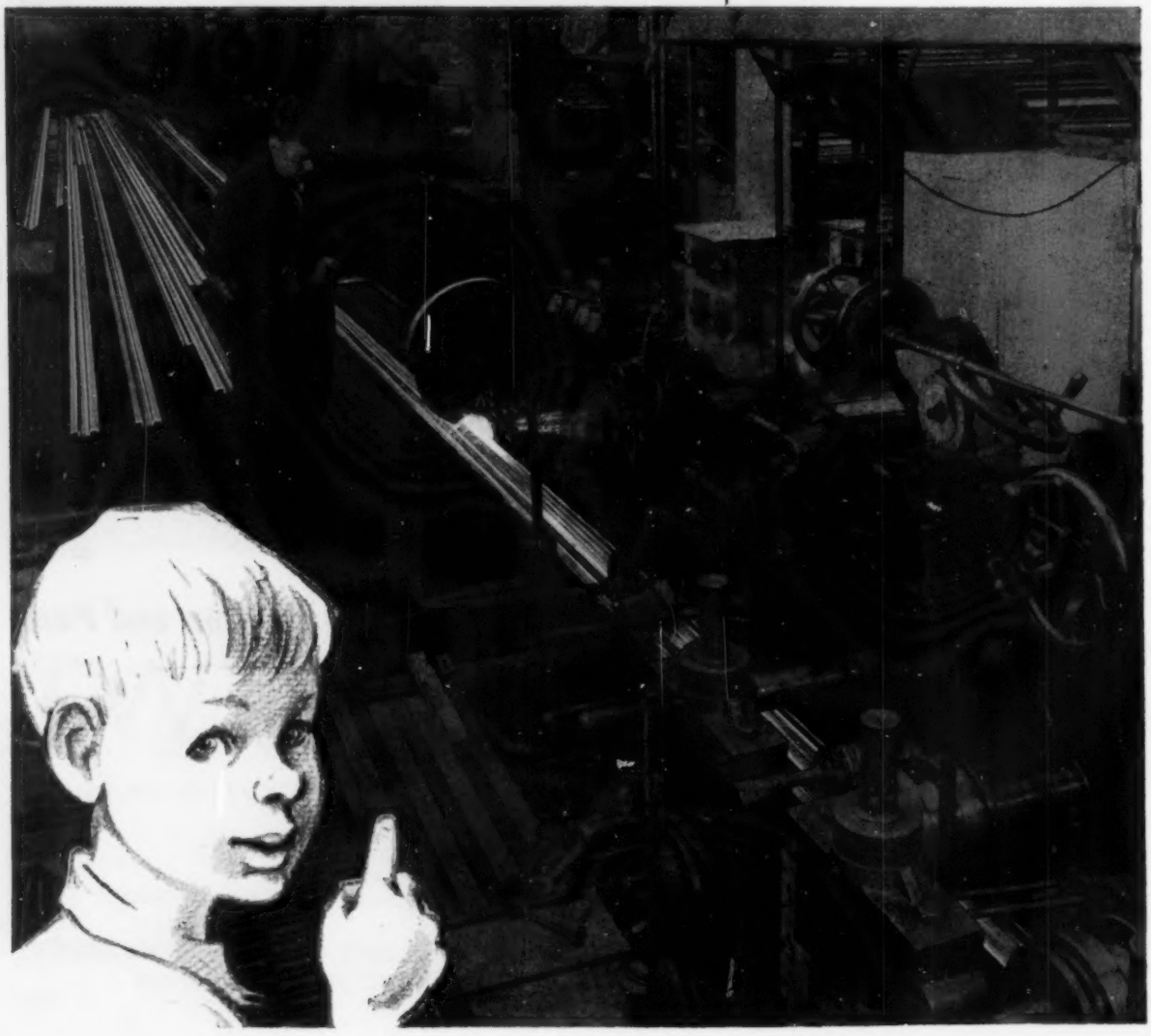
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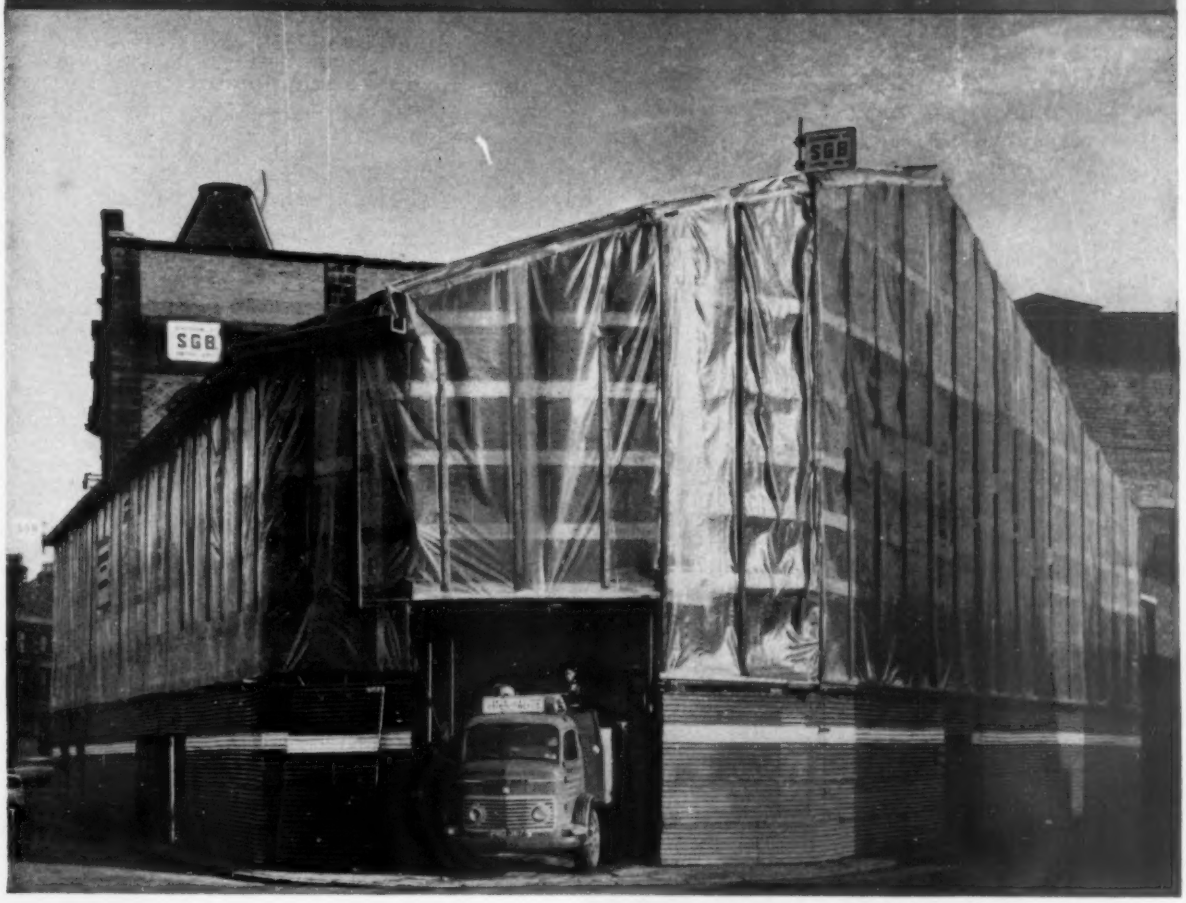
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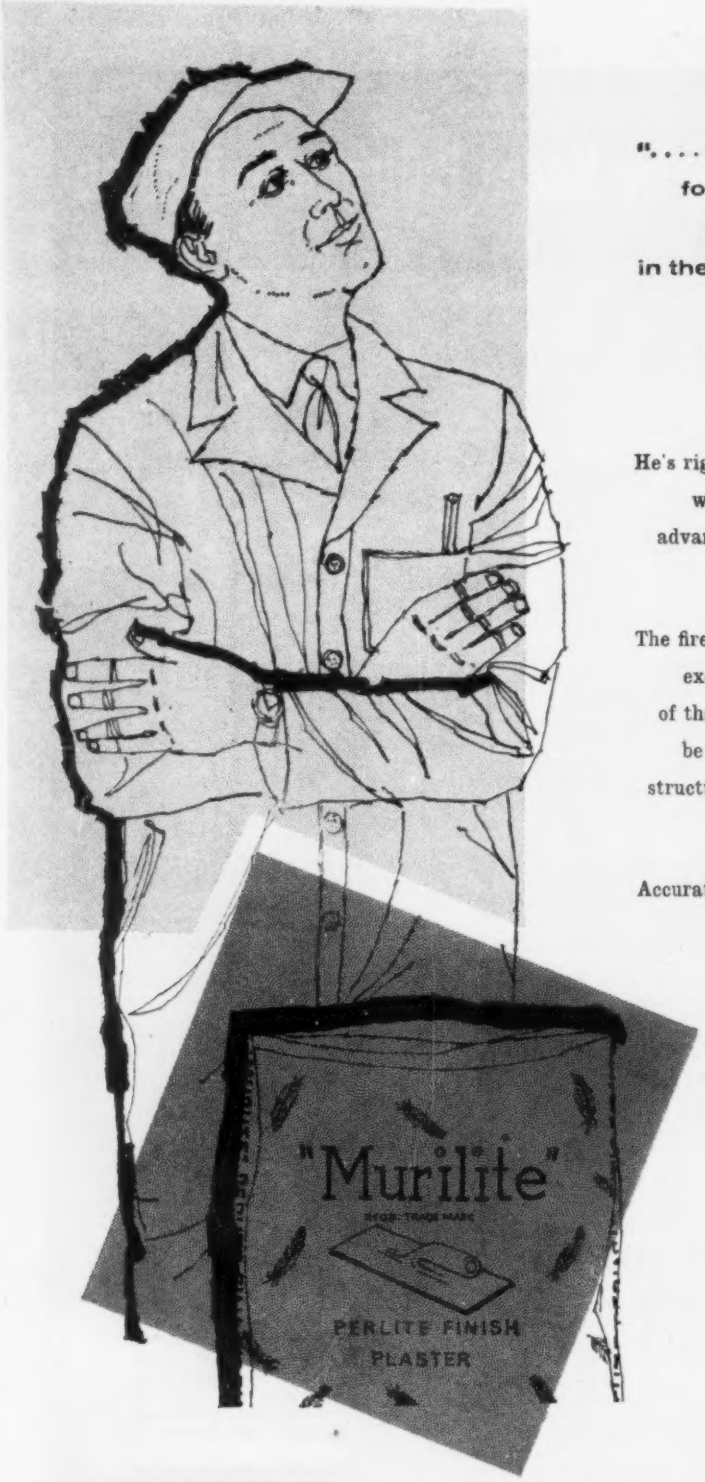
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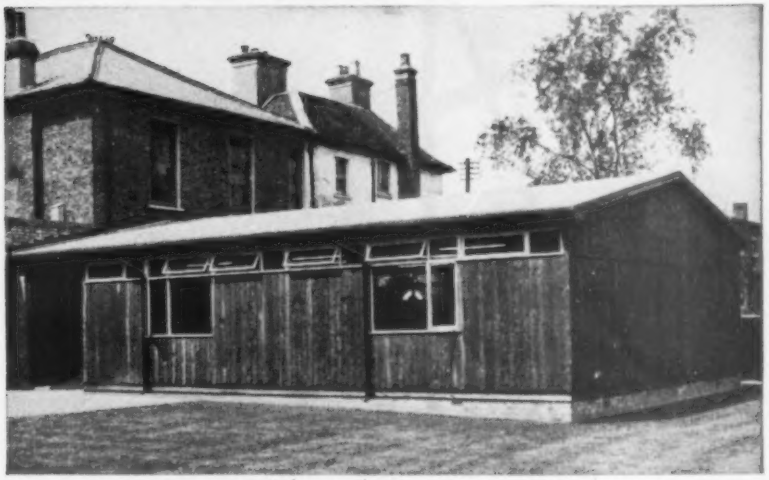
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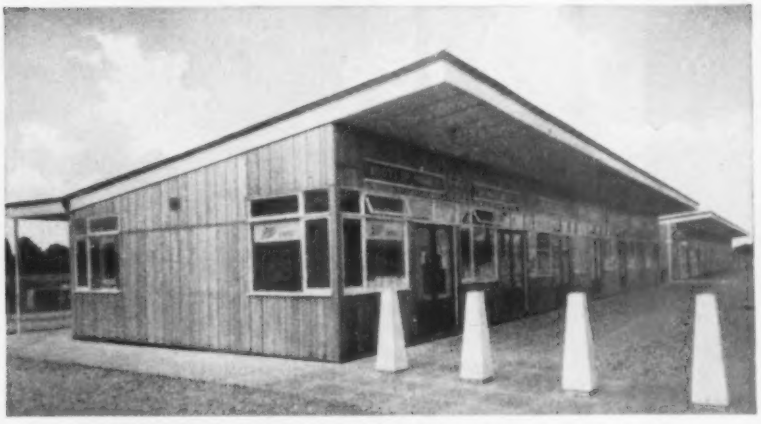
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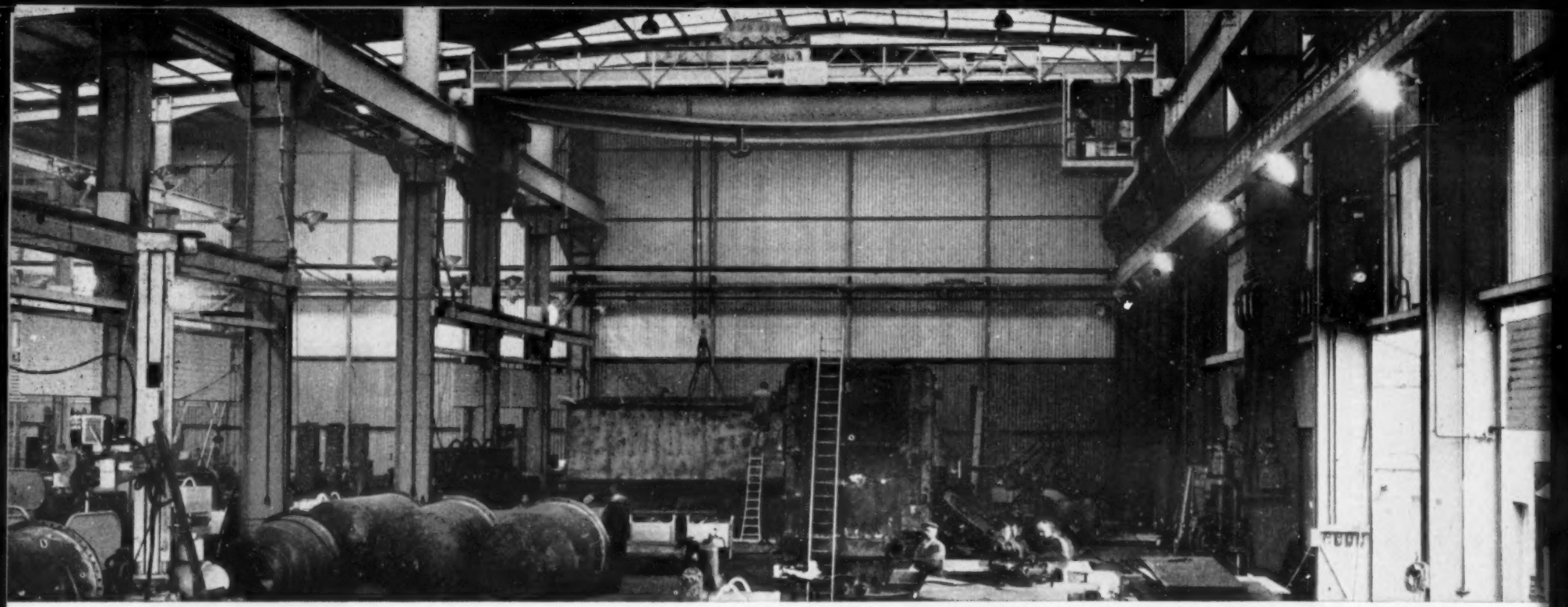
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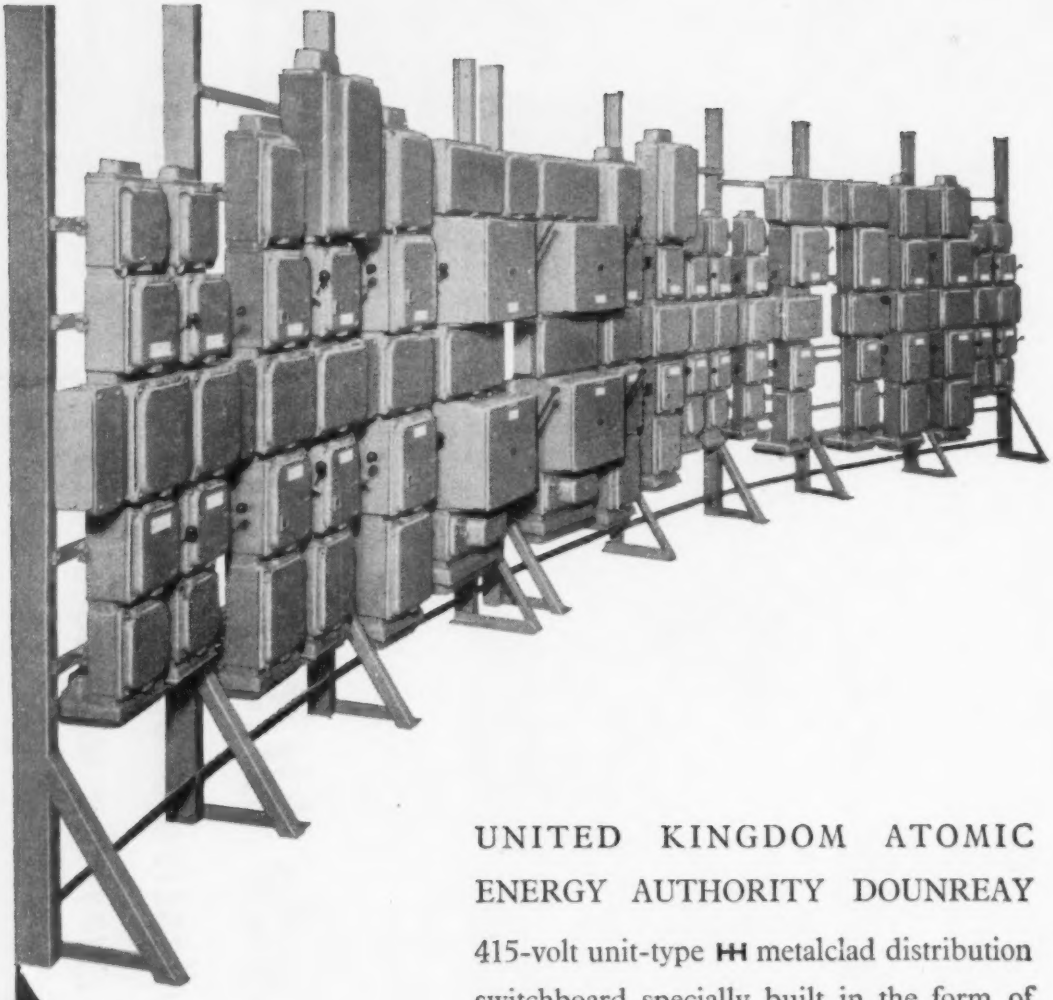
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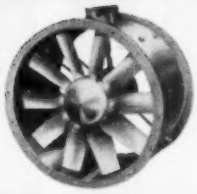
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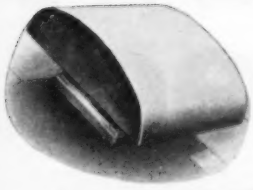
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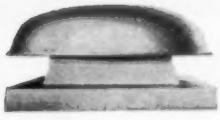
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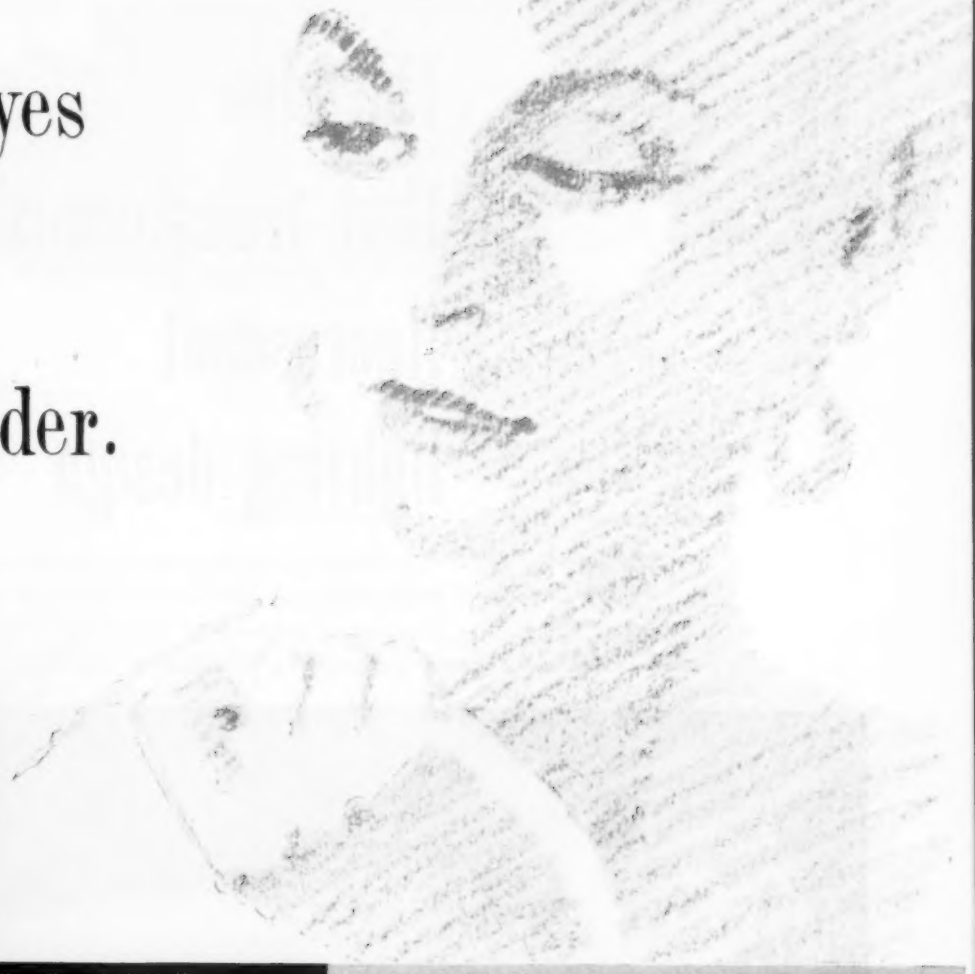
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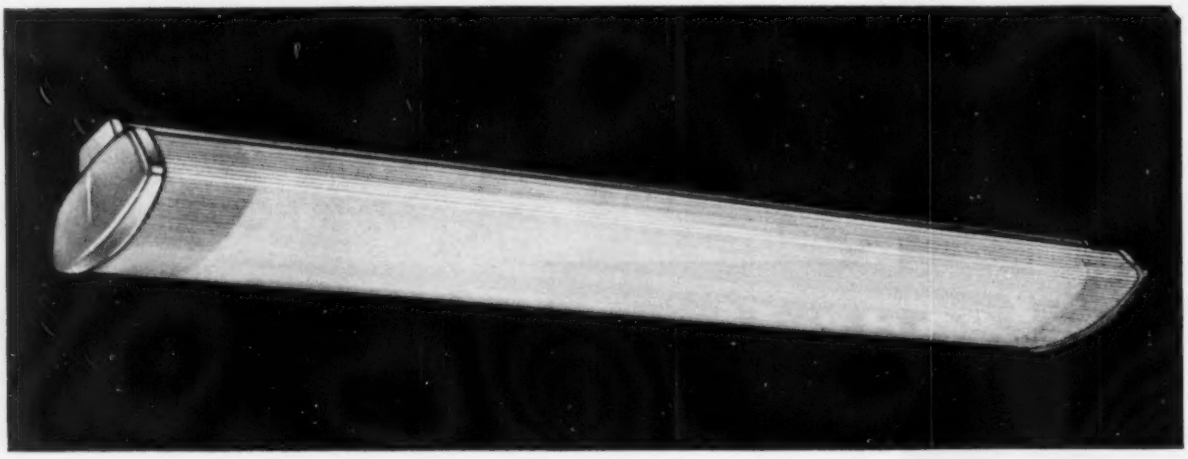
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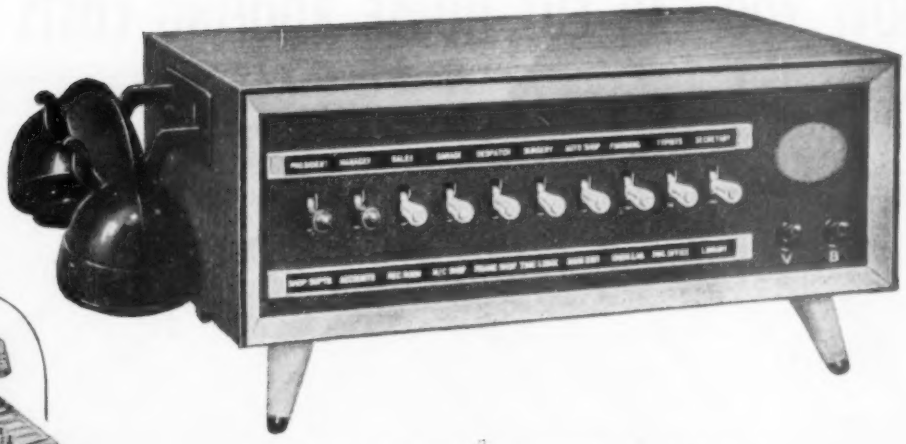
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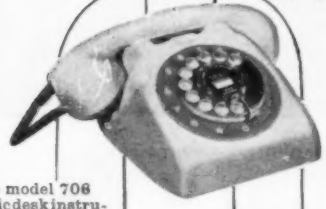
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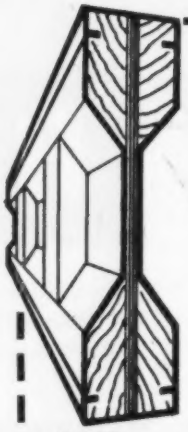
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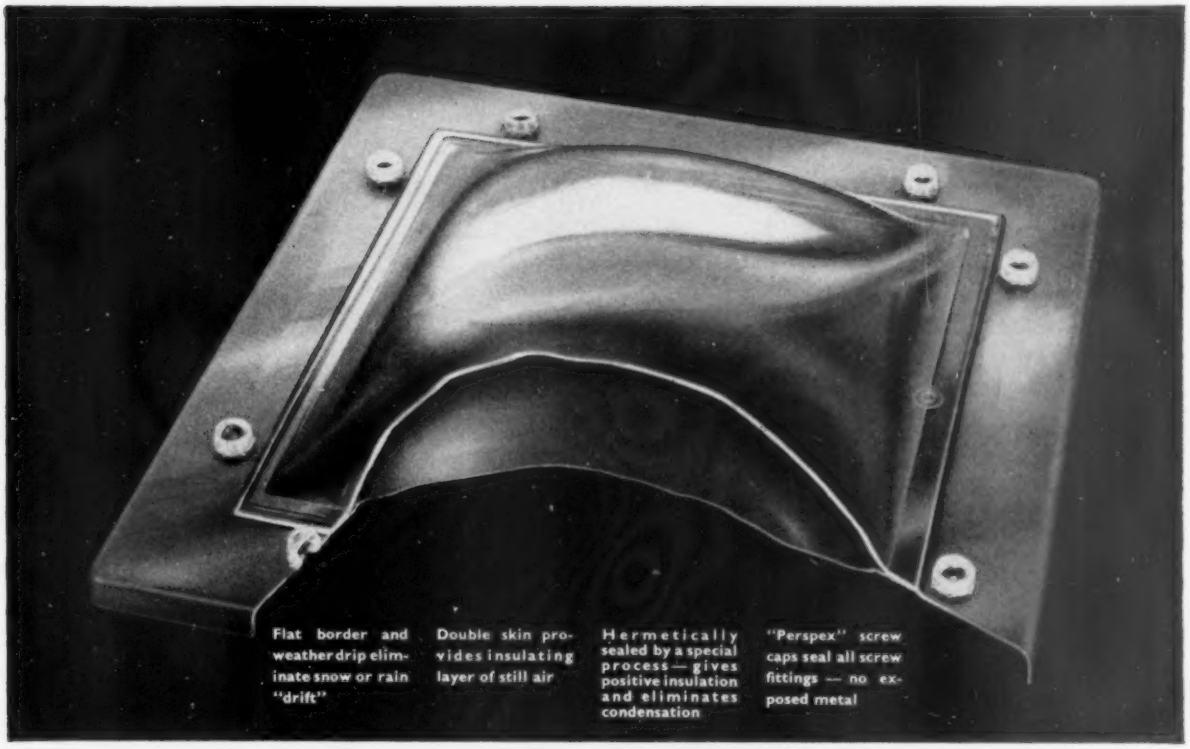
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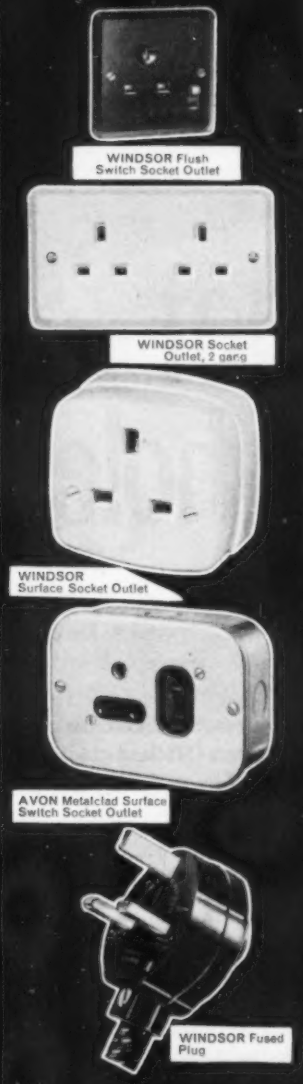
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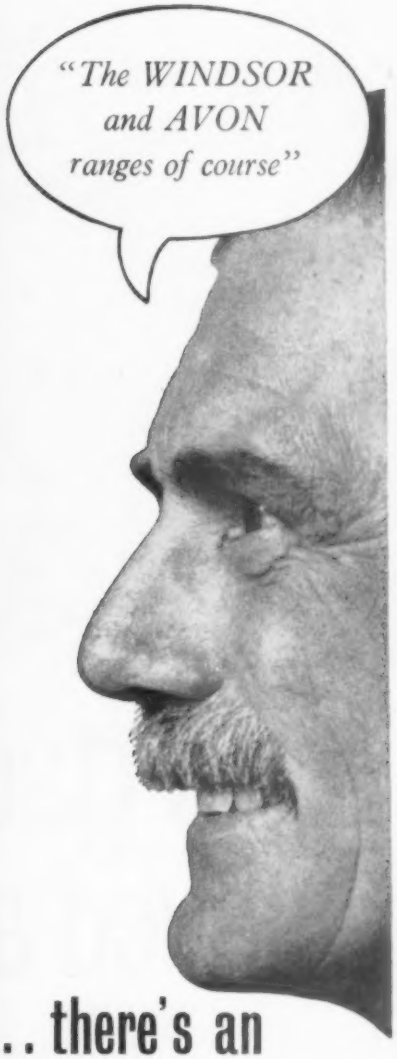
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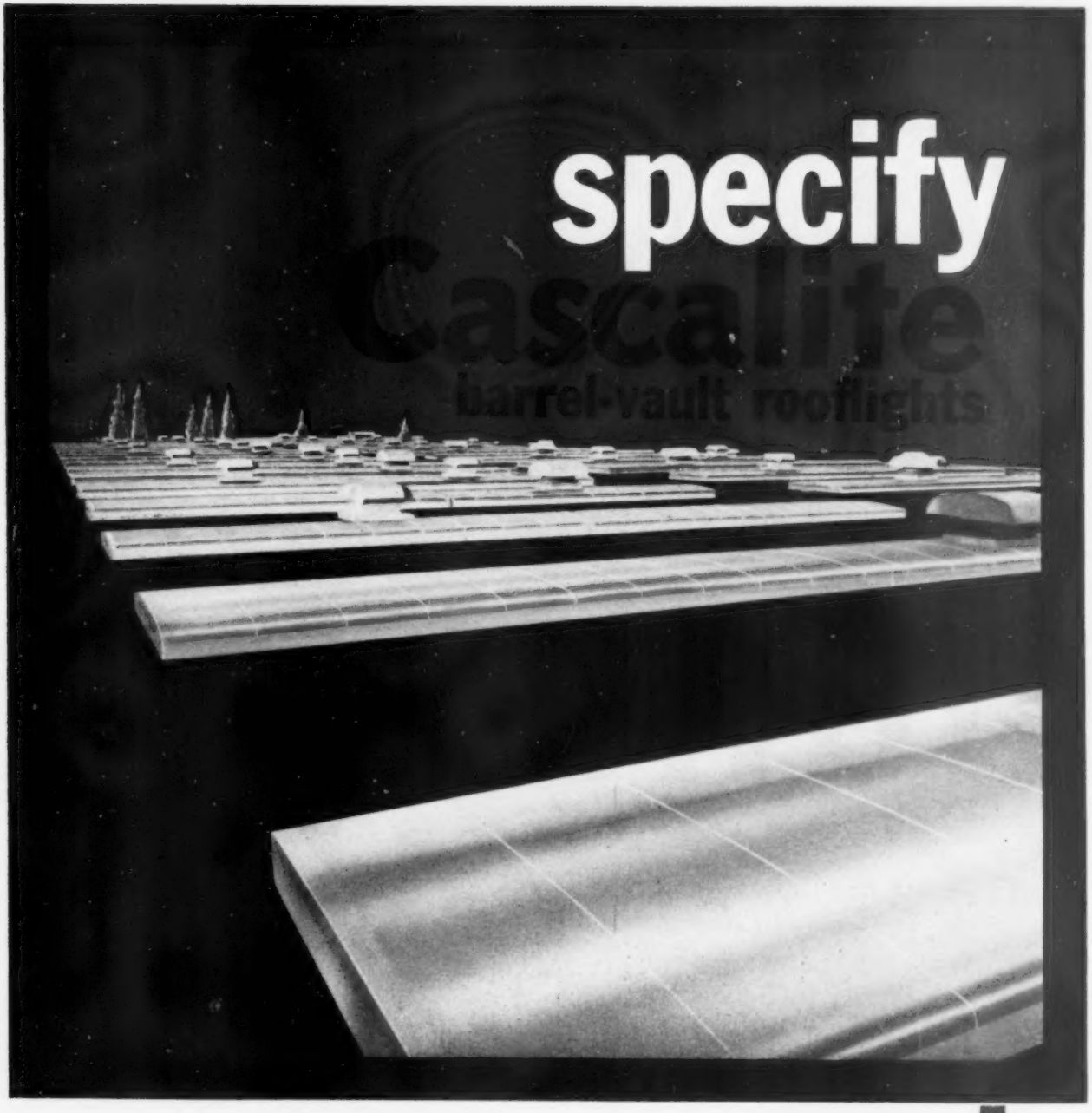
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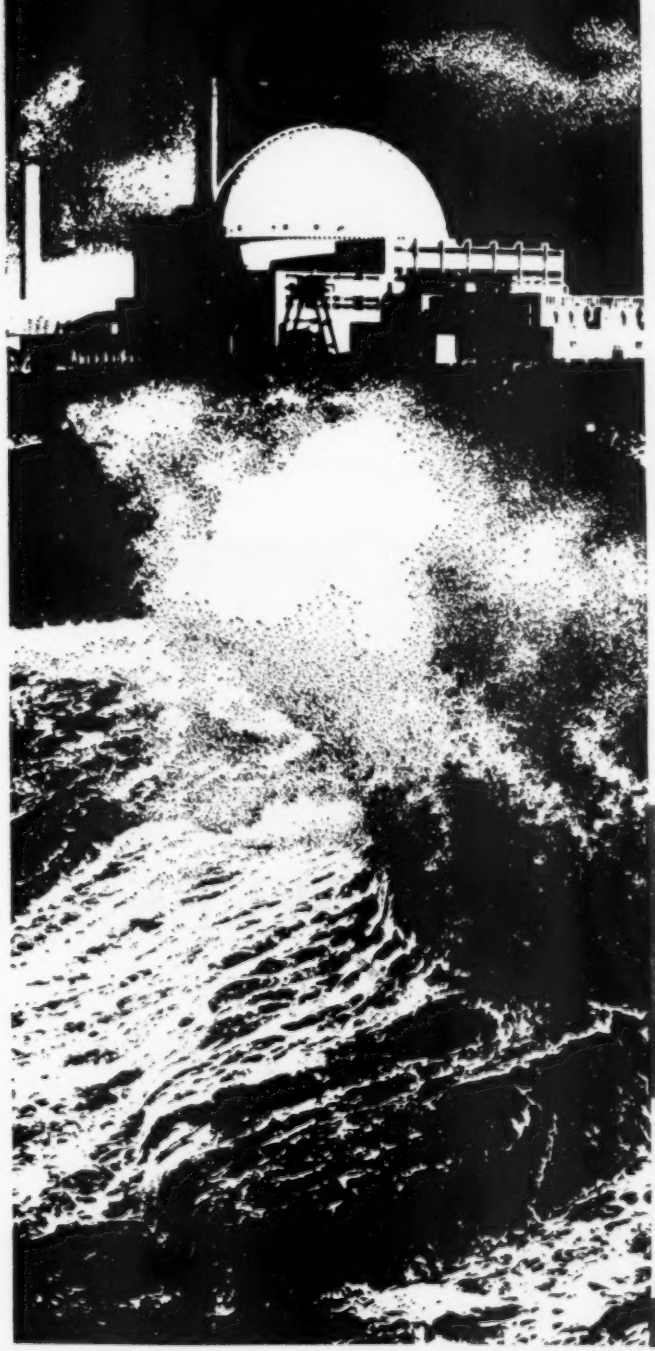


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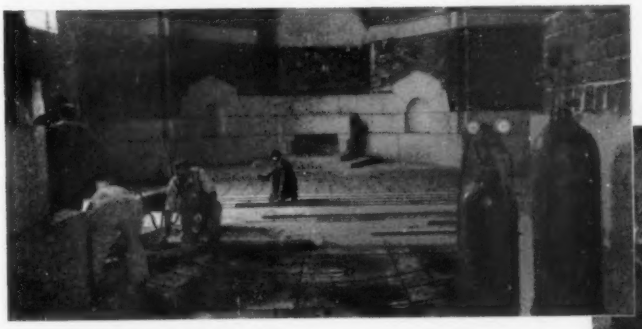
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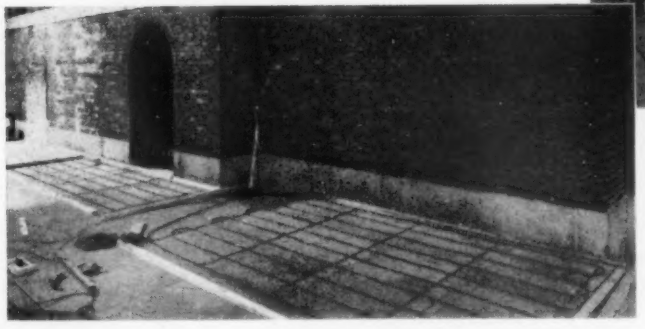


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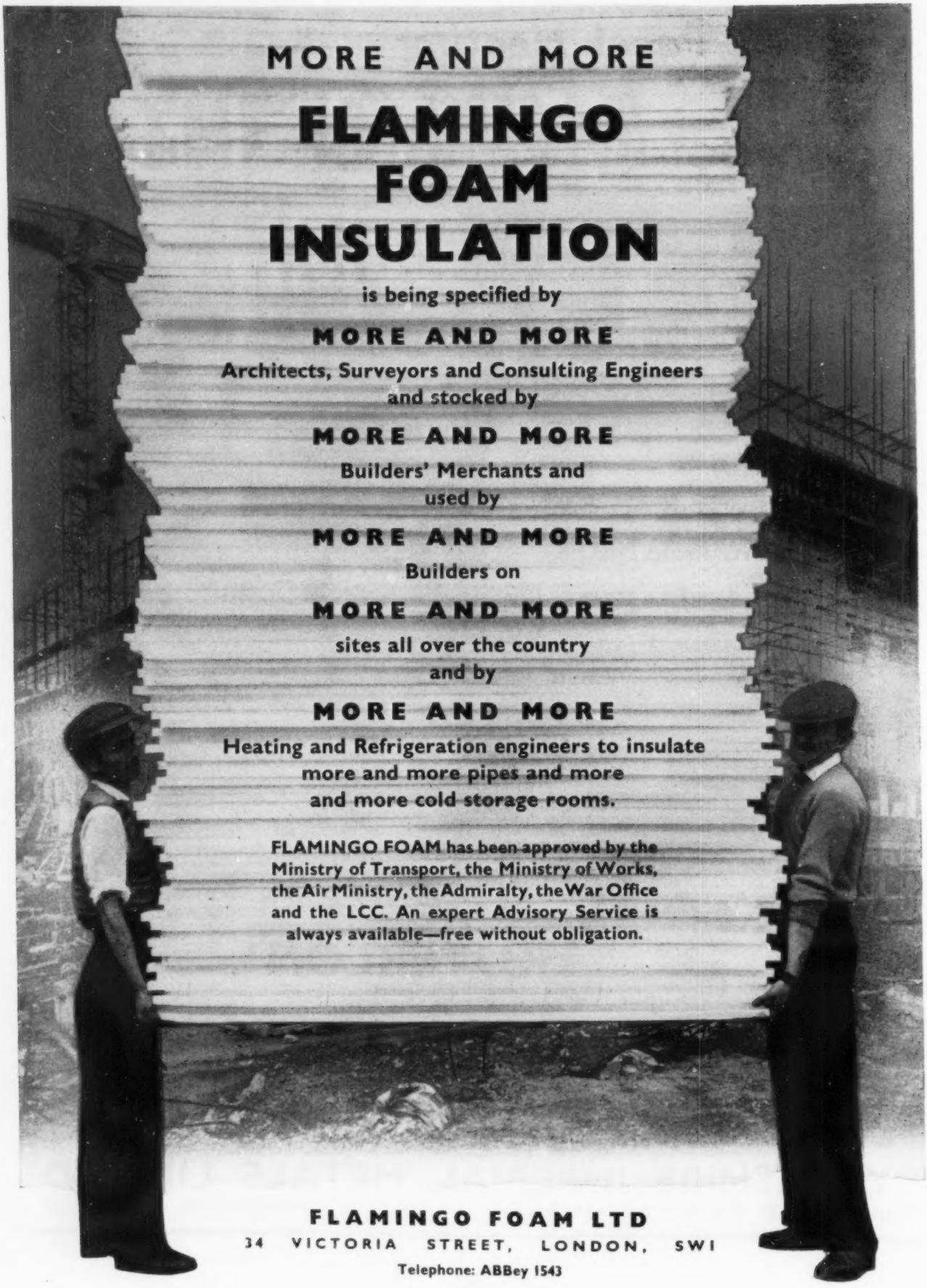
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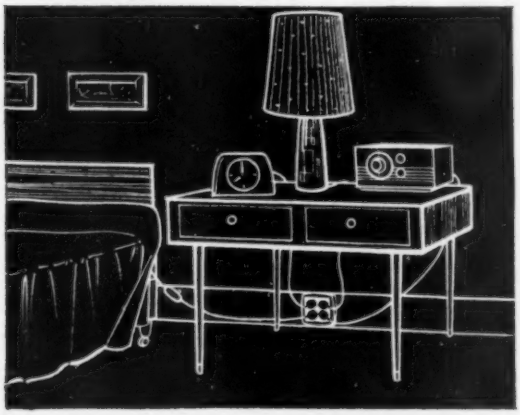
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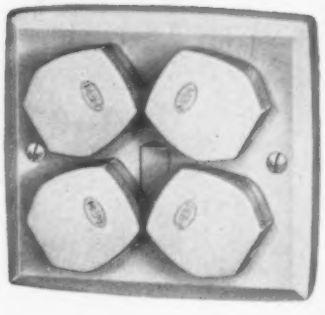
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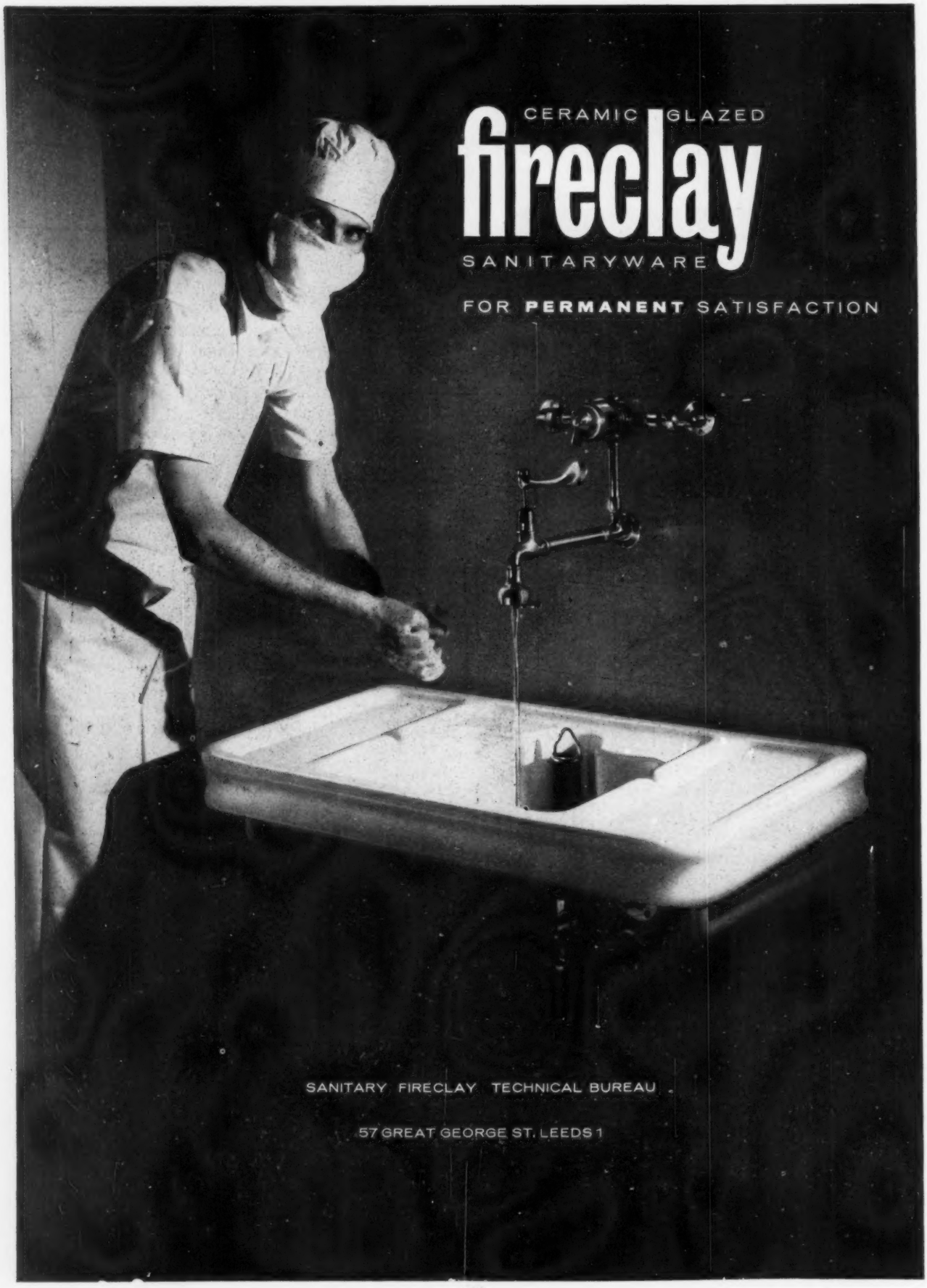
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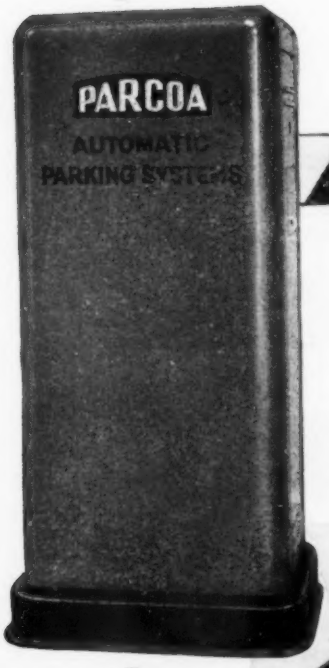


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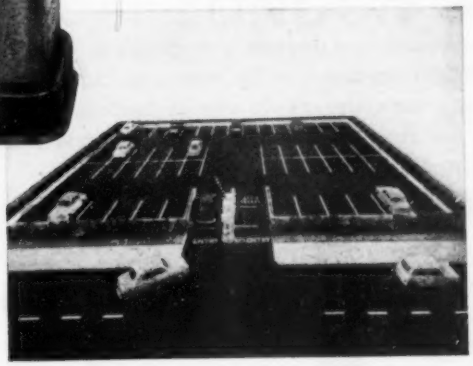
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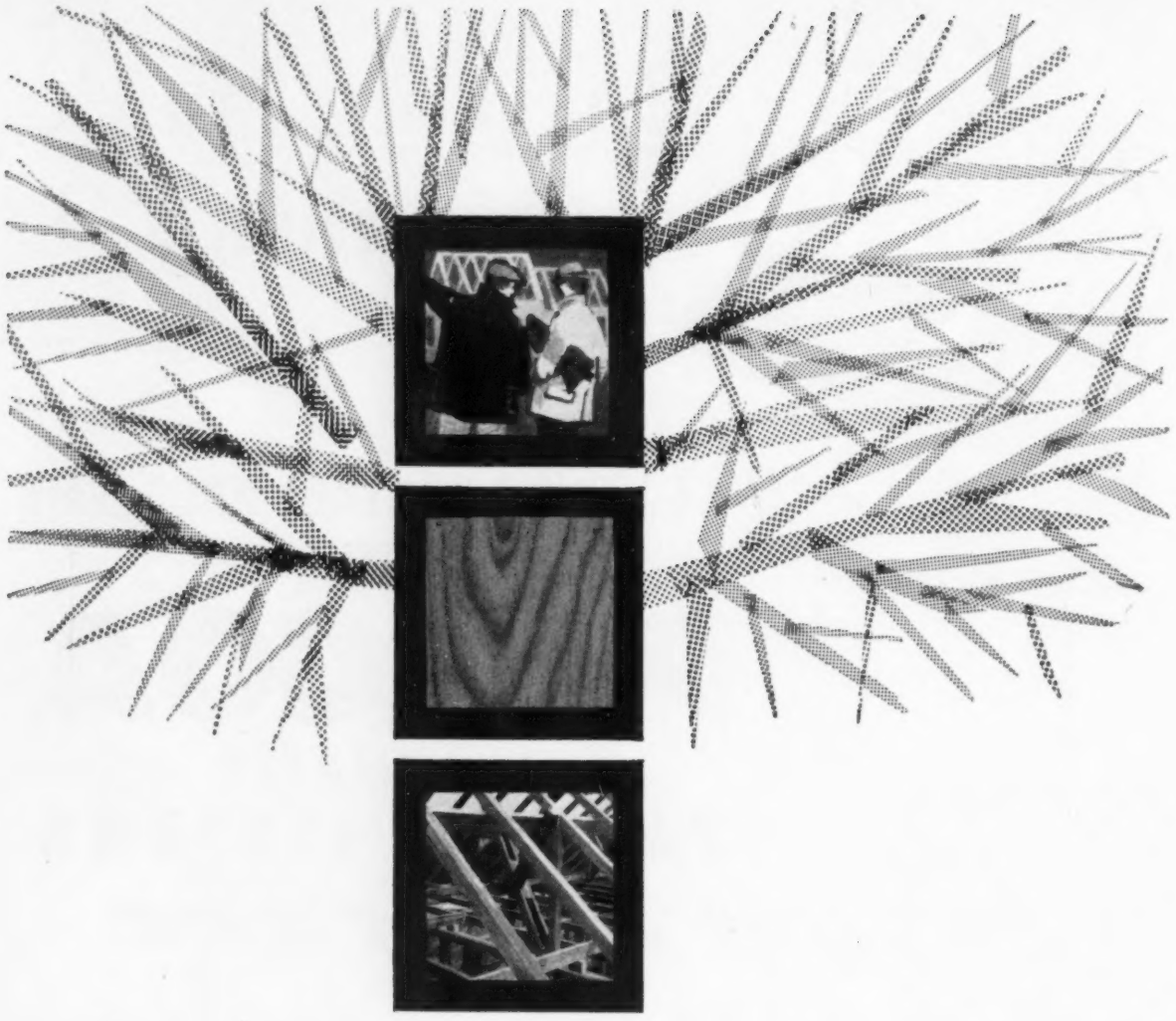
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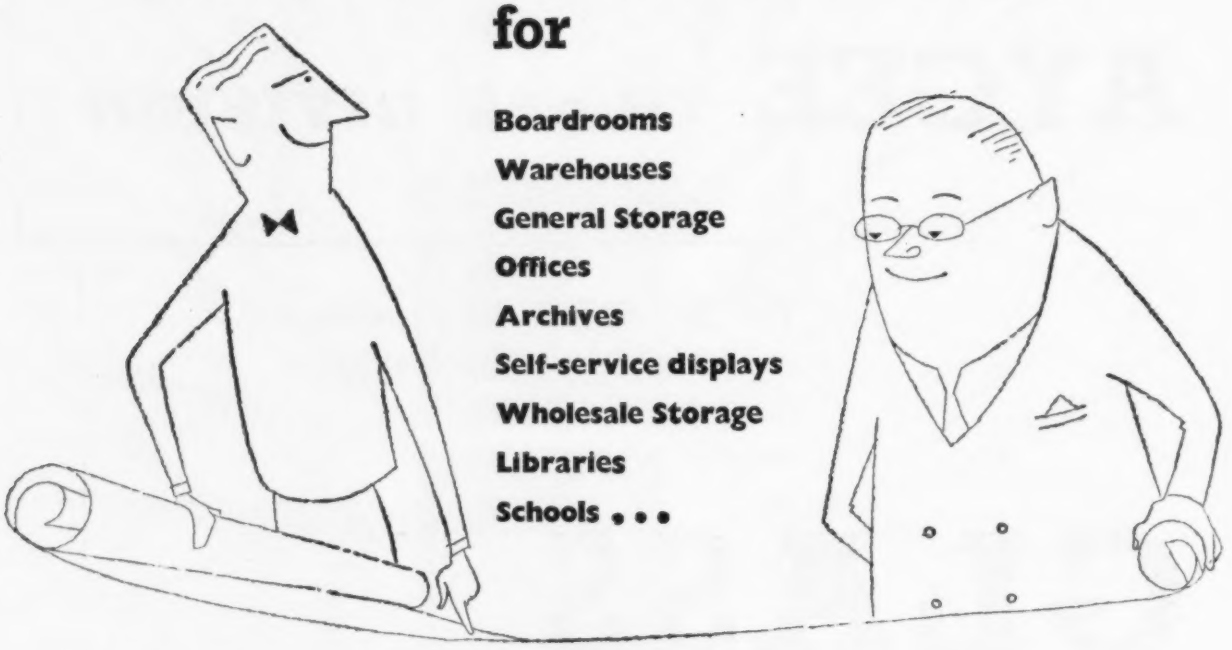
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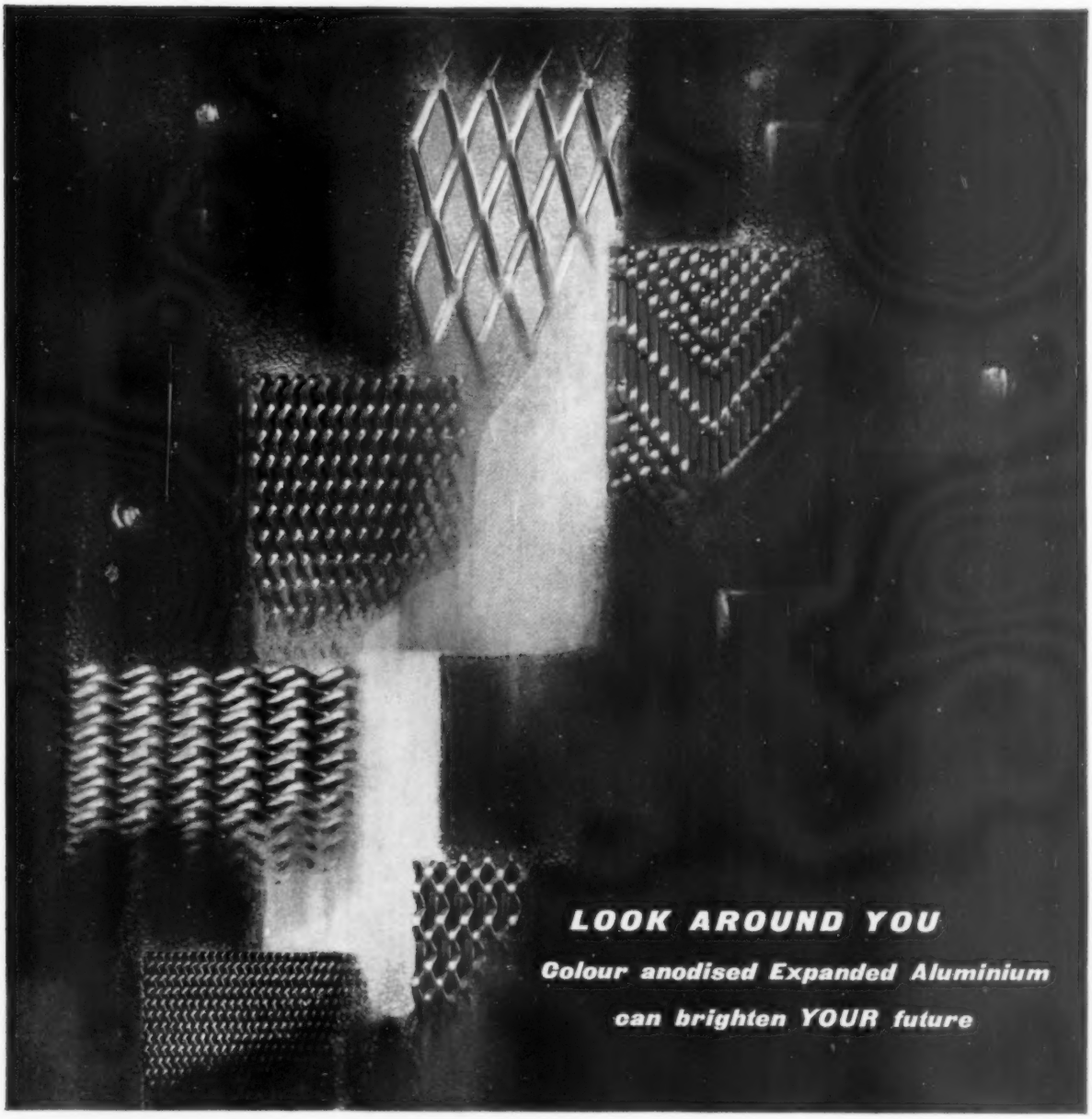


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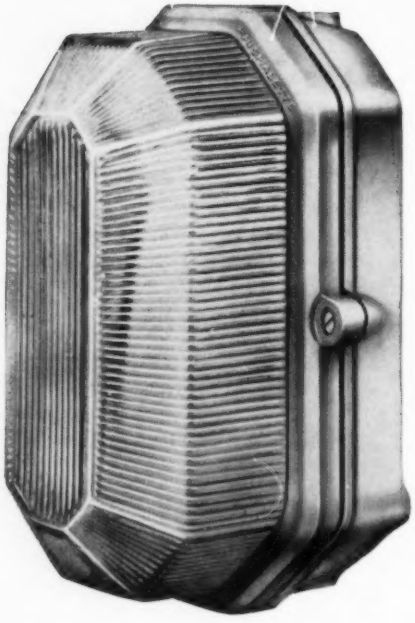
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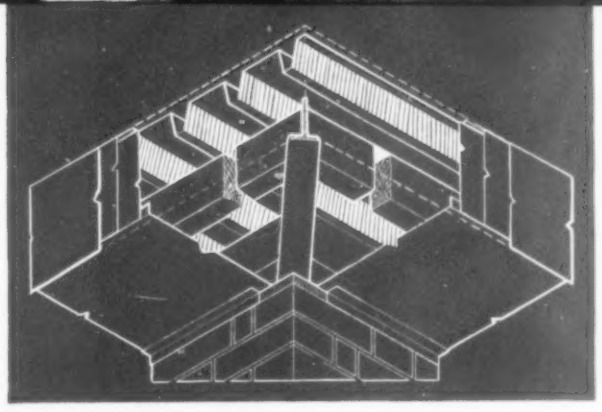
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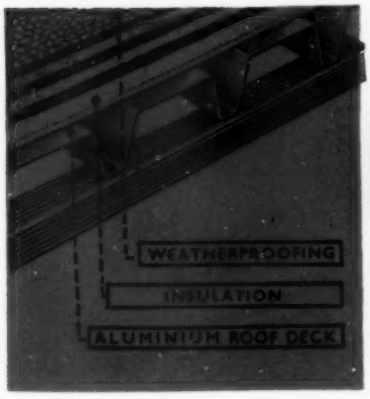
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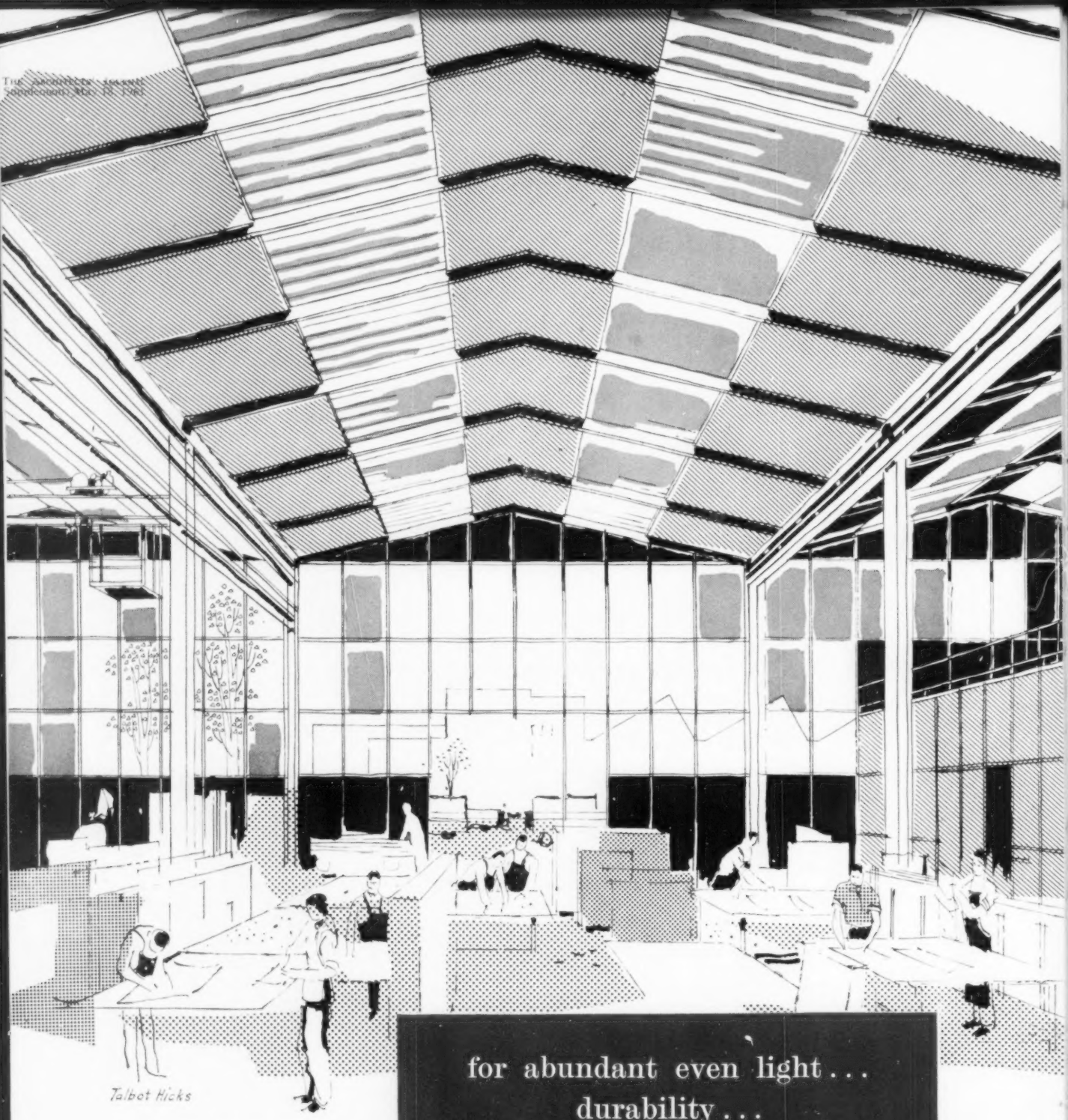
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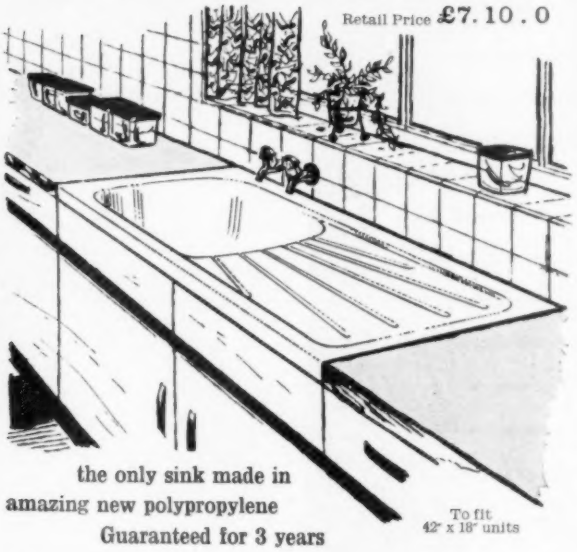
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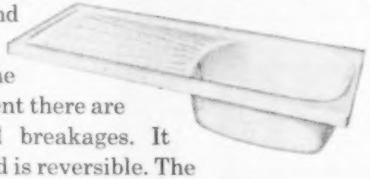
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NOT QUITE ARCHITECTURE

MS (l) 48—Delicious!

Classification, presentation, standardisation, these have now achieved a proper importance in the public eye. However, certain basic subjects still await attention, and I was reminded of one outstanding case by a favourite molar of mine which was absolutely shattered by a palpable coffee cream that turned out to be a nut butterscotch. Yes, chocolates! A standard classification and a set of visual guides for the representational marking, allied to nomenclature, is essential for chocolates. A comprehensive system, enforced by legislation, would be of the greatest possible benefit and could relieve untold misery. Who has not suffered the ignominy of searching for an orange cream only to find dull caramel instead?

A classification symbol could be imprinted on the base of each chocolate to simplify matters until the surface markings become second nature. Classification itself is not a difficult problem. The basic sections are milk or plain, hard or soft, and flavour of centre. Thus the basic symbols are M, P, H, S and numbers to correspond with flavours.

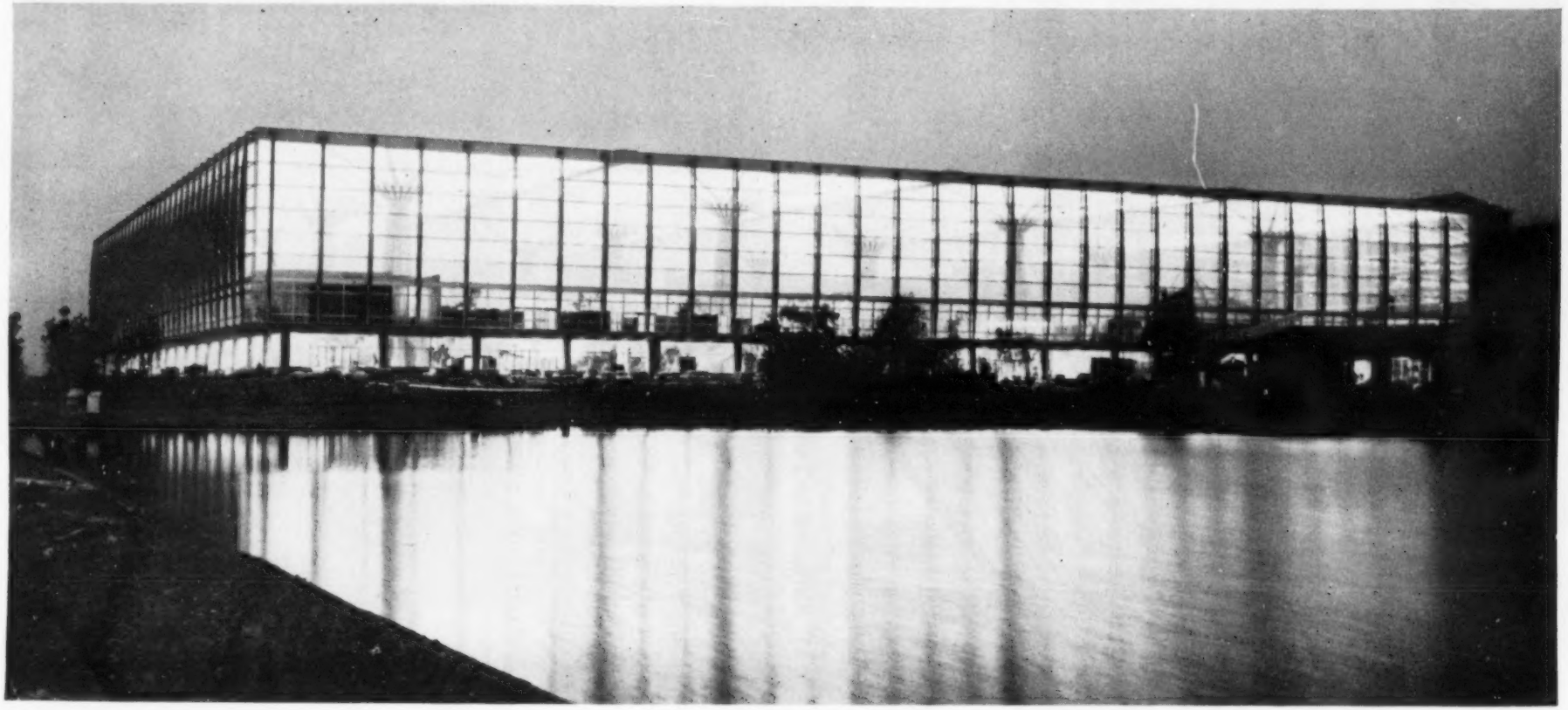
Hard should be sub-divided by the addition of (n) to indicate a nut, soft by adding (l) to denote a centre containing any liquid (for obvious reasons).

The flavours within each category would be numbered from 1 upwards, number 1 being the most popular, so that a connoisseur, by asking for a selection containing a high proportion of PS(1)385 and PH(n)72, would immediately receive attention suitable to his taste.

This system would assist the planning of selections and the buying of loose goods, and could easily be adopted; but the actual shape and surface marking of each individual item is a much more complex subject.

Turin 61

The Pier Luigi and Antonio Nervi designed Palazzo del Lavoro, focal building of the Turin 61 Exhibition, celebrating the centenary of the unification of Italy, which opened last week, is a splendid example of modern exhibition design. It is 525 ft. square, and each of the 16 82-ft. concrete columns supports its own square of steel roof. These decks are not connected, but covering the openings between them are cloches of clear glass. This hall houses an international exhibition devoted to Man at Work, in which 18 nations and five international organisations have taken part. Gio Ponti worked with Nervi at the problem of how to break up the vast interior space: this is done with 45-ft.-high light screens, consisting of sheets of plastic clipped between aluminium poles, an idea which is almost very successful. The Exhibition will be more fully illustrated next week.





Above are three different manufacturers' expressions of coffee cream, none of which has really caught the spirit of the centre. The first is downright misleading, the shape and marking conveying something far more sharp and less cloying, e.g. lime or peppermint cream. The second has a certain feeling for coffeeness, but why the aimless squiggle on top? Why not a bold coffee bean form? The third is too nondescript and ambiguous to warrant judgement.



It's the same with the second lot—all orange cream. The first is definitely citrus, but could apply equally well to lemon, tangerine or grapefruit. The second should obviously be for a far sweeter fruit centre. The last is so definitely Turkish delight, and only Turkish delight, that no alternative is conceivable.



The next row, believe it or not, consists of three different chocolates; they stand, from L to R, for caramel, toffee and mallow, and cokernut ice.

The approach to the marking system must be bold, its future application flexible. Bold enough to break with possibly outdated traditions and flexible enough to allow for new advances within the framework; for instance, can the system deal with a completely new centre such as anchovy cream? Flexibility is also essential so that various new combinations can be included and still be clearly defined externally, such as hazelnut and *pâté de foie (gras,* of course). These examples may seem exotic, but tastes do change and this must be catered for.



Above are three suitably expressive forms for peppermint crisp, anchovy cream, and violet cream.

This is not all: the markings should be as bold as braille for tactile interpretation in the dark (theatre, cinema). Then your molars would be safe and your palate uncheated.

A panel to cope with the whole problem should be set up immediately and work proceed without delay. Readers who are willing to lend their support to this work are invited to write to the NCCS at their London address, marking envelopes "Classification/visual representation (nomenclature), three-dimensional expression: external appearance" in the top right hand corner.

BRIAN GOODENOUGH

The Editors

A PLACE TO PLAY IN HIGH FLATS

THE play's the thing—and it seems the only thing—that seriously worries mothers of children under five who live high up in tall flats, and all who are engaged in local authority housing should read the Report of an Enquiry into this problem which has just been published by the Housing Centre.*

Of some 200 families with children under five, living above the fifth floor in 12 blocks of high flats in London, two-thirds expressed keen anxiety about the safety of small children, with fear of opening windows, and of private and access balconies, while three in five felt that their children were deprived of the freedom they needed to play and meet other children. Many suggested nurseries or supervised play groups on the premises as the solution.

Provision of safe playgrounds around flats has *theoretically* been part of MOHLG policy since 1952 ("Living in Flats," HMSO). So it is pretty depressing that out of the 12 blocks of tall flats included in the Enquiry, only six provided any playgrounds, only three had special playgrounds for young children, and none provided for supervised play.

The Committee puts forward some highly practical proposals: that the MOHLG official manual on planning of high flats should include standards of play space and equipment; that periods of supervised play be laid on where no nursery schools are available; that private balconies be provided with temporary mesh safety screens (suggested in an LCC report on balconies in 1956, but not yet common practice); that rooftop play spaces should be considered. "Special attention should be paid by local authorities to the present division of responsibility between their departments . . . the pre-school child is apt to fall between several bureaucratic stools, and this may account for the present neglect of his special needs in many otherwise admirably designed estates." We applaud these recommendations.

Play is a necessity as great as food and shelter for children; through it they learn not only to use their bodies and minds but to get on with other people, and deprivation of play can increase the number of unhappy, anti-social individuals as surely as deprivation of good food used to produce rickets. It is for architects to recognise this now, as more and more families are housed in higher and higher flats.

These flats are popular: the LCC finds that the top flats of a tall block are usually let first. They are desirable economically because of our native land shortage, and architecturally to prevent the monotonous spread of great modern cities, but they produce new social and planning problems. That of providing a place for small children to play freely, safely and sociably, should be one of the easiest to solve.

* "Two to Five in High Flats": An Enquiry into Play Provision for Children aged Two to Five Years, 2s. 6d.



CUBA BEFORE RIBA

When Sir William Holford was flown from Philadelphia to the White House the other day, the President was too absorbed with Cuba to talk about town planning. But it is typical of the enthusiasm of that new Kennedy man, Dr. Robert C. Weaver, that he wanted to take his British visitor's views on planning right to the top. Dr. Weaver, a Negro of outstanding ability and humanity, is administrator of the US Housing and Home Finance Agency (responsible for publicly-financed housing) which keeps a corner of its eye on urban renewal and may soon be having more responsibility for urban planning. Sir William, who was on a three-day flit as an understudy lecturer for J. K. (Affluent Society) Galbraith—suddenly translated into US ambassador to India—impressed Dr. Weaver most by his insistance that traffic is an integral part of town planning problems.

SUCH IS FRAME

Professor Carl Condit, author of that classic on the Chicago School, *The Rise of the Skyscraper*, has just produced a twentieth-century successor to his book on American building art in the 19th century.* It is a book of the same quality—though few of the examples discussed have quite the pioneering air of those in his earlier work—and it contains good, solid factual information and other unfashionable stuff. The author's constructional-engineer approach is refreshing. Although he is not insensitive to aesthetics, he discusses for instance, some of the debased skyscraper architecture of the twenties simply because of the fascinating steel frames behind the squalid decoration. Elsewhere he discusses with equal zest, the great railway terminals such as Grand Central, giant bridges of all sorts, motorways and Frank Lloyd Wright's concrete work—and he gives an engrossing penultimate chapter on dams and waterways. I wish he hadn't bothered with his last chapter, "An Architectural Appraisal, but the rest of the book is so good that it is difficult not to forgive him.

* *American Building Art: the Twentieth Century.* Oxford University Press (New York) 15 dollars.

STAGING: A COMEBACK

I haven't got my Old Moore handy, but I imagine it predicts a lucky month of May for theatres (after an unlucky April brush between the Chancellor of the Exchequer and the National Theatre). In spite of the recent change of council in Nottingham, the threats to Peter Moro's playhouse have come to nothing and work on the foundations has begun. And Powell and Moya's theatre at Chichester, for which the foundation stone was laid last Friday, is—in the words of Peter Hall—"the most exciting theatre to be built in this country this century." Then, of course, there is news of the formation of an Association of British Theatre Technicians, affiliated to the international Association, and including a Theatre Architecture and Planning Sub-Committee which includes Peter Moro, Elidir Davies (Mermaid), Norman Branson (Questors), and people like George Devine, Peter Hall and Sean Kenny. A conference of the International body at the National Film Theatre in June is to discuss planning adaptable theatres.

David Stephenson's All Saints, Newcastle-on-Tyne. See "In Danger".



INFERNAL COMBUSTION

It was good to hear J. M. Richards saying, in a BBC talk, that carscape is not so much a matter of unavoidable necessity as of attitude of mind. He said that the fantastic burden of carscape-to-come might be avoided if there could be less individual egoism, some cutting-down on unnecessary car dives into high-density areas and a glamorising of public transport. He speaks, I know, as a non-driver who lives fairly centrally in London. But even some car addicts must surely agree that there is no reason why the car should escape control. We have adjusted ourselves quite politely to density control in housing—why not in motoring?

MANY HANDS MAKE SPOILED SOUP

I understand that Norman and Dawbarn's new passenger airport building at Birmingham (illustrated on page 680, May 4) was erected under the supervision of the Ministry of Aviation and that the furnishing was done by the city's architect's department. How can a job handled in this way be really satisfactory? The Ministry's action is surely inexcusable. Government departments should either make up their minds to hand jobs over to outside architects or handle them internally. Split working of this kind can lead to confusion, loss of time and poor detailing.

SHOULD AN ARCHITECT ? ? ? ? ? ? ?

Developers who want to pull down Stanley Terrace—an elegant row of early Victorian houses in Chelsea—are appealing against the LCC's preservation order. By the end of the month the terrace's future will be decided at a public inquiry—and with it the future of Paulton's Square, the best square in west London. Visually the terrace is an integral part of the square—it forms one corner of it and returns along the King's Road, and if it goes the effect of the square, as it opens off King's Road, will be destroyed.

What bothers me is that as in so many cases of this kind the developer is advised by a firm of architects—members of the RIBA, who share its responsibility for furthering the cause of good architecture. Should architects do this sort of thing? I know if they turn down the job someone else will accept it, but that doesn't seem very moral reasoning. Have readers any views on this problem?

NOTHING LEFT

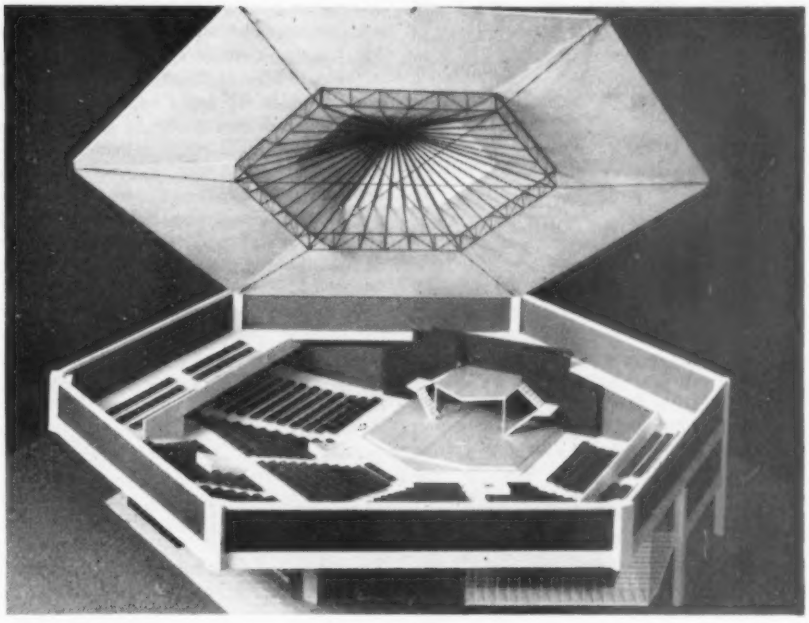
The most off-beat exhibition in London is the collection of Russian lithographs at the Grosvenor Gallery—a collection by artists connected with the Leningrad Experimental Graphics Laboratory. They are not so experimental that they throw you across the room (to quote the old Ukrainian proverb), and they mostly follow a loosely School-of-Paris style that you might find in any group show of prints. There is, however, plenty of variety (without approaching the abstract) and no one toes any Socialist-Realist line. What is more it would be difficult to name any comparable non-capital city (Glasgow? Marseilles? Chicago?) that could boast 27 working print-makers of comparable quality.

*

The art gallery itself, by the way, is yet another new one that probably wasn't there last time you looked. When you look again you'll find it gives you an opportunity to sit in a black leather Eames lounge chair—unless the proprietor, Eric Estorick, is in occupation.

SITTING BEHIND THE FAIENCE

The Victorian Society always manages to find an unfamiliar building of its period for its annual general meeting. This time the Society met (and heard Sir John Summerson speak on some Victorian Slade professors) in the Debenham House in Addison Road—a house faced all over with coloured faience which many architects must have looked at with astonishment from outside. Before scholarly readers remind me that the house (built in 1906 by Halsey Ricardo) is not Victorian, let me remind *them* that the Society's mandate runs until 1914. Its members had quite a treat—octagonal domed hall lined with mosaics, quantities of William de Morgan tiles, garden that used to be contiguous with Holland Park until the Ilchester estate sold off a strip of it for the erection of a row of particularly unpleasing mock-Georgian houses. They also heard their President, Lord Esher, tell them that the Society is now the recognised spokesman on Victorian art matters and is beginning to make its influence felt.



Model of Powell and Moya's Festival Theatre at Chichester, at the foundation stone stage. See "Staging: a Comeback".

*

The next thing on which it may have to speak is a group of houses around Holland Park, the subject of a public inquiry triggered by yet another developer's objection to an LCC preservation order. These include Leighton House and a gaggle of other artist-residences once inhabited by people like William Burges and G. F. Watts (described by the developers as "an old square"). Quite apart from their historical associations, the Burges House and Leighton House are far too good as examples of their period (those who don't know the Arab court of Leighton House should remedy the lack at once) to be lightly demolished, and I hope the Ministry will not allow the preservation orders to be set aside.

IN DANGER

"National Disaster" is not a phrase that should be used lightly in trying to preserve buildings—it is like crying wolf too often. But if All Saints, Newcastle, disappears the words will be justified. Designed by David Stephenson in 1786 it has an elliptical nave decorated outside and in with a beautifully elegant yet masculine Adamesque touch, and shows a spatial imagination, especially in the scissors staircases in the vestibule, which make it particularly an architects' building. The roof is dangerous and needs £25,000 to make it safe—the cost of three medium-size surburban houses, or a quid each from 10 per cent of Newcastle's population. A committee of architects, businessmen and church officials is trying to raise the money: if you want to give something or can induce anyone else to do so, the address is: C/o Colonel E. G. Angus, Chairman of the Appeal Committee, Box 113, Lloyds Bank, Grey Street, Newcastle upon Tyne 1.

FURNISHING LAGS

"Are you going contemporary?" The question was asked the other day in an advertisement in *The Times*. Excited readers who delved into the next two lines, hoping to find news of the latest trend—and whether or not it had knobs on—were surprised to find they were being offered a home for the throwouts they had been expecting to sell. "Unwanted bedroom furniture, carpets, rugs, etc.," said this naïvely hopeful piece of copy writing, "can be collected by progressive London Settlement to furnish accommodaton for ex-prisoners."

ASTRAGAL

LETTERS

C. N. Lambert, A.R.I.B.A., A.A.Dipl.

Anthony Michael, A.R.I.B.A.

R. B. Wood-Jones, Ph.D., M.A., B.Arch., A.R.I.B.A.

David W. Cronin, M.R.P., B.Arch., A.R.I.B.A.

RA or RIBA?

SIR: The May 4 issue's article on the Royal Academy Exhibition of Architectural perspectives prompts me to think that it is high time that the RIBA held its own Summer Exhibition of work, thereby overcoming many of the criticisms levelled in this article at the RA's display of "applied art" and giving an opportunity for the use of the camera, working-up sketch, model and perspective.

At the same time the public would be introduced annually to architecture of real merit, chosen by a selection committee in much the same way as the RA (and no doubt calling forth as much controversy).

I feel that an exhibition of this sort, if well presented and publicised, could do much to encourage the general public to not only "meet the architect" but perhaps to meet good architecture.

CHRISTOPHER LAMBERT

Norwich

Accessibility and Escalators

SIR: Mr. Langmark, in his letter on Accessibility and Escalators (AJ, April 20) may be falling into the same trap as so many designers. Surely we must not think of any system of segregation as making use of an "upper" pedestrian level at all.

Two basic principles must be understood:—

1. The pedestrian level is taken as the natural level and buildings are designed to serve, and be served, by it.
2. Until overall segregation is achieved, the meeting of old city and the new level must be designed for. This can be achieved in two ways: the resolution in a short distance, using either mechanical or foot power vertical rise (lifts, escalator, moving surface, or stair and ramp): alternatively by a long-distance transition, in which no rise is evident, and which presents the pedestrian with a view down to the vehicle level without the knowledge of his having climbed.

This last method is psychologically the most satisfactory, for it does not complicate the principle of "natural" level; the quick rise facilities emphasise the very fact that it is raised.

In Barbican, the slow rise principle is being used near St. Mary Aldermanbury; stairs and ramps are in general use in many different forms; escalators may be used in Moorgate Station, the BP development, and also at the Aldersgate junction; public lifts and moving surfaces are the only devices not contemplated at this stage.

Mr. Langmark would agree that as Barbican is the only area of large scale and workable segregation in the world under construction, it is essential that it should be safe from criticism in detail, which would then quite wrongly be linked with shortcomings in the segregation concept itself. Nevertheless, experimentation with as many varieties of vertical resolution as is possible, will give us valuable workable data for the newer areas.

The world's periodicals are overburdened by projects with the elevated ribbon of pedestrian movement, added as an afterthought, a shallow gimmick to supposedly establish membership of the segregation club.

ANTHONY MICHAEL

Ashford, Kent

Vandals at Dewsbury

SIR: I am by no means a die-hard preservationist, but the proposed destruction of the 600-year-old Moot Hall at Dewsbury, Yorkshire, seems to be as bad a case of officially approved and inspired vandalism as anything I have encountered. I have described it as such in letters published in the *Yorkshire Post*, the *Dewsbury Reporter* and *The Guardian* and also defended this matter without "pulling any punches" on television in the Northern ITV programme "People and Places."

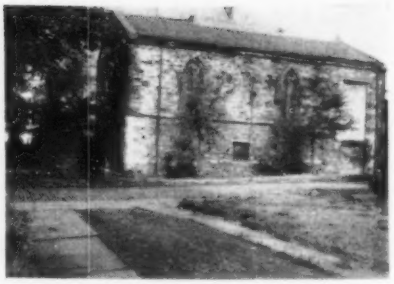
The Moot Hall, so-called, is almost certainly the manor-house, dating from about 1300. It is generally regarded (e.g. Pevsner's West Riding) as 13th century. Such buildings are extremely rare—I do not believe there are more than 15 buildings of this class in the whole country, and they would include such better-known, but no more important, examples as Boothby Pagnell, Lincs, and Little Wenham, Suffolk. It is, moreover, the only old building surviving in Dewsbury, apart from the much restored church which closely adjoins it, forming an attractive and historical piece of environment.

It is proposed to destroy this building, taking the road within 30 ft. of the church, to round off a corner in the Dewsbury by-pass. Other proposals have been put forward but the readiness of the church to dispose of the property and the total lack of public interest or appreciation have enabled the Council to adopt this easier way.

It is a typically short-sighted, expedient half-measure and recalls the recent report of the Royal Fine Art Commission which condemned many such new road projects as "depressing and destroying urban areas."

What is particularly unfortunate is that the M.O.W., who had classified this building as an ancient monument (I am informed by the church who own the property that it was scheduled), have gone back on their decision and consented to the demolition.

This is not the first time, but it makes ridiculous the whole business of scheduling and listing, a machinery for preservation which is riddled with loop-holes and compromises.



The 600-year-old Moot Hall at Dewsbury

The only thing that will force a change of mind on the local authority is likely to be public opinion, and it seems it must be opinion outside Dewsbury. It is now being backed by one of the major preservation societies, but I believe buildings of this type, part of existing townscape, have value not just as antiques, but as part of the present scene.

RAYMOND B. WOOD-JONES
Senior Lecturer

School of Architecture,
University of Manchester

Blast and Belfast

SIR: Quite by chance, Mr. Edwin Johnston, correspondent to your BASA supplement for May, gives the key to the problem of architectural education in Belfast City. He writes of small student numbers, administrative and financial difficulties; such considerations take precedence over a fundamental of the problem to which he refers in but a passing way: the lack of tradition.

That Mr. Johnston should so evaluate is in keeping with the predominantly artisan culture of Great Britain he has come to represent and no doubt accept.

The lack of tradition, together with the concomitant lack of reputation and a sense of isolation which Mr. Johnston mentions, springs from the refusal of the Belfast people to take their rightful place as citizens of the second city of Ireland; instead they are the ghetto dwellers of the butt-end of the United Kingdom.

They are isolated by definition: unrecognised, and rightly so, as fellows by those who understand and respect the title "British"; unwilling, contrary to the nature of things, to be part of Ireland and the Irish. Those who throw off their birthright must accept the inevitable isolation and be as nomads in the cultural world, without reputation, without roots, without home. The rational world respects expression of indigenous culture and has little time for self-disinherited hangers-on.

Belfast will have a school of architecture, as Dublin has two, when the parents and school children of the city realise that their inheritence is Ireland; when they realise that this island offers a life exclusive in kind, when they come to understand and value it.

DAVID W. CRONIN

Dublin

NEWS

COMPETITION

Harlow Housing

The results of the competition for the layout and design of housing in the Passmores Neighbourhood, Harlow, Essex, have been announced. The first premium of £1,000 was awarded to Michael Neylan, A.R.I.B.A., whose scheme appears below. Second premium of £750 was awarded to Geoffrey J. Darke, A.R.I.B.A., Dipl.Arch., and Robert Blom van Assendelft, and third premium to David Croghan, M.A., A.R.I.B.A., in association with David Davies, M.A., A.R.I.B.A. (consulting quantity surveyor: Victor Bugg, A.R.I.C.S.). In addition the assessors, H. T. Cadbury-Brown and Victor Hamnet, commended three other schemes out of the total of 41 entries submitted. These were the scheme, submitted by Francis J. Bancroft, A.R.I.B.A., Dipl.Arch., and Philip Rogers, the scheme submitted by Alan Goodman, A.R.I.B.A., Dipl.Arch., and A. J. Short, A.R.I.B.A., A.A.Dipl., and the scheme by M. R. Crux, A.R.I.B.A., M.S.I.A.

The competition called for the design of a housing area comprising a minimum of 270 dwellings on an interesting and undulating site approximately one mile south of the town centre. One of the objects of the Corporation in promoting the competition was to give architects the opportunity of producing fresh ideas on the use and furnishing of living space outside the normal restriction of accepted regulations whilst still safeguarding the intention of these standards. In their report the assessors commend the generally high standard and the fact that competitors had entered into the spirit of the proposals. They express the view that ". . . the competition has been very successful in exactly the way hoped for by the Corporation. . . ."

A full report of the competition will appear in next week's issue.

PUBLIC INQUIRIES

Nuclear Power Station at Anglesey

A Public Inquiry will open on May 30 at Amlwch, Anglesey, into the Central Electricity Generating Board's proposed nuclear power station at Wylfa Head, at which many objectors give evidence, including North Wales (Hydro-Electricity) Protection Committee.

This committee has published on 8-page illustrated folder on its reasons for opposing the projected power station, which would not only entirely alter Wylfa Head, but would result in "overpoweringly massive new grid lines" on 150-ft. pylons crossing the island to join a similar new line from Trawsfynydd and "bring a new and utterly unwelcome change to the North Wales Coast."

The Committee believe that the solution to unemployment problems in the area is not a vast construction, temporarily employing 2,500 people, but more small and permanent productive enterprises.

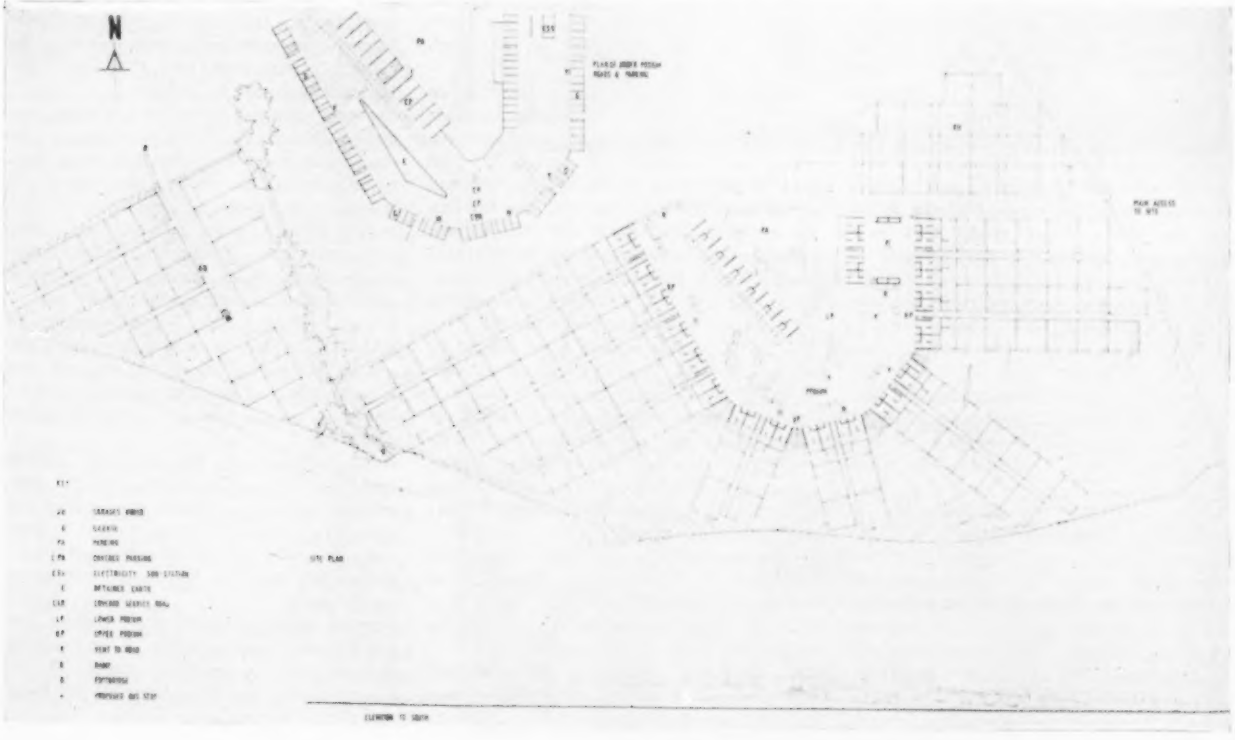
No Ironstone from North Oxfordshire

So many suspicions were aroused at the North Oxfordshire Ironstone Inquiry that Richard Thomas and Baldwin's must have been confident of official approval beforehand, since they claimed to have spent considerable sums on new, specially designed machinery for dealing with this type of ironstone, that the refusal of permission by the Minister of Housing and Local Government deserves to be widely publicised.

The Minister found that there was "no evidence that the needs of industry make it essential to work these areas"; he did not consider the damage to agriculture to be sufficiently serious or permanent to be "of itself sufficient reason for withholding permission.

"But taking the agricultural considerations together with the injury to amenities, the Minister is of the opinion that ironstone working should not be permitted in these areas, especially in the very attractive country south of the River Swere, without clear evidence of an over-riding economic need. He is not convinced that there is such a need in relation to the whole or any part of the land in question."

The layout of the winning scheme in the Harlow Housing Competition submitted by Michael Neylan. The visual crux of this scheme is a single-storey platform, roughly crescent in shape, built on the crown of the hill on the main site. The platform is for pedestrians only with vehicle circulation, garages, an electricity sub-station and other services beneath it. Flats and maisonette blocks are placed around the edge of this platform and fanning out behind them at right angles to the perimeter of the platform and the contours are courtyard houses. The gaps between the blocks of flats and maisonettes provide access to the houses by way of stepped earth banks as well as views to the wedges of green space between.



RIBA

Welcome for the Housing Bill, But . . .

The RIBA, in a statement issued last week on housing policy, welcomed the recent White Paper on Housing in England and Wales, but suggests that some points need re-examination. In particular, the RIBA would like to see additional housing subsidies to assist local authorities in dealing with problems of urban renewal and comprehensive development.

"The RIBA would welcome any steps that could be taken to remove the artificial distinctions between housing and town planning in consideration of the administrative and financial aspects involved in comprehensive redevelopment," says the statement. "The increasing need for the renewal of the older parts of our towns and cities seems to call for a review of these aspects in their wider setting."

Remarking that the higher rates of subsidy for a graduated scale of high blocks of flats remain unchanged, the statement points out that these arrangements "have been strongly criticised because they discourage three-storey buildings. This is often a particularly valuable form of development because flats can be provided without lifts and the additional height provides relief from the monotony of continuous two-storey development." The Council would therefore like this point re-examined.

The RIBA doubts whether "exhortations and consultations" are going to do very much to solve the problems of land use.

"The problem is not entirely one of allocating land for development," the statement points out. "Extensive areas of land already zoned and usable for houses are not in fact being made available for development by their owners. . . . Unless measures are taken to make this land available . . . pressures on green belts will increase.

"It is most undesirable that more land should be zoned for development while land already so zoned remains unused. In this connection it is the opinion of the RIBA that the White Paper might well have devoted more attention to the relevance of increased densities and better use of land."

The Council particularly welcomes the proposal in the Housing Bill to make loans to approved non-profit-making housing associations, but fears that the proposals intended to encourage modernisation of old building might "delay the redevelopment of areas which are already obsolete and which should be renewed comprehensively at an early date.

"Where authorities have proposals for redevelopment within the next 15 years no improvement grant is payable, but there are many areas where the local authorities should have proposals for redevelopment within 15 years but have not," the statement points out. In such areas, modernisation of individual houses could prejudice proper redevelopment, and the Council urges the Minister to require local authorities to submit proposals for comprehensive development areas wherever the layout and condition of the property would justify it.

London Architecture Bronze Medal

Denys Lasdun and Alexander Redhouse's luxury flats at 26 St. James's Place, overlooking Green Park, have won the London Architecture Bronze Medal for 1960, by unanimous decision of the RIBA jury, who considered that Lasdun had tackled an extremely difficult problem (the presence of Spencer House next door) in an urbane and decisive manner, and with superb finish and detailing.

Ten buildings were visited by the jury, and three were considered up to bronze medal standard, had Lasdun's flats not been in the running: They were Leonard Manasseh's Rutherford School, Robert Maguire and Keith Murray's church at Bow, and Basil Spence's Thorn House.

Annual Argument

Two-tiers was the main subject discussed at this year's AGM of the RIBA as was to be expected. Fears were expressed that the Council were, in fact, being tempted to prejudge the matter. This fear was caused by a revealing phrase in the Annual Report of the Council for 1960. The Board of Architectural Education had written, under the title "Training for Technicians," that final decisions on the principles involved could not be taken until the results of the office survey were known, but a sub-committee had been appointed to "draw up at once a scheme of training for technicians so that no time shall be lost if the Council approves in principle the setting up of such a category."

The first part of the evening was taken up with a *special* general meeting to confirm the minutes of the previous special meeting, which was concerned with altering the byelaws. In fact three of the byelaws had had to be redrafted since the last meeting (see the JOURNAL for May 4) and after lengthy argument and incomprehension the redrafted byelaws were further amended and somewhat reluctantly (and subject to Counsel's opinion) accepted by the meeting.

The AGM started with a brief speech by Donald Gibson, honorary secretary, who sketched in the main themes of the past year: the great expansion in building, the opportunities and responsibilities of architects, their relatively poor financial return, the survey of offices and the courses and other aids being given to architects so that they can match their responsibilities.

R. D. Butterell asked if the Council had any plans for revising the Charter, and whether the Council accepted that major decisions about the profession could only be made after a poll of the members.

The president, Professor Sir William Holford, replied that it would be very bad for the Institute to keep making changes to the Charter; but he agreed that they would have to face up to having a new charter before long, but not before as many vital points to change as possible had been noted.

Cleeve Barr, chairman of the Constitution Committee, supported the president, but pointed out that the longer the Charter is left unchanged the more opposition there will be from other professions to a more all-embracing charter.

In the report of the Competitions Committee it was stated that because of the increase of work a panel of members had been formed to share the work of scrutinising conditions. Donald McMorran said how important it was that this work be carried out in the strictest confidence and proposed that all members of the panel and those associated with them should be banned from competing. Chairman Clarke Hall, replied that members of the committee could compete, except for the member acting as scrutineer, an answer which failed to satisfy Mr. McMorran.

R. D. Butterell lead the questioning on the Board of Architectural Education's report, expressing his great concern over the proposal to draw up a scheme for training technicians and asking for an assurance that no far-reaching decision be taken without the RIBA consulting the views of the members. Robert Matthew, replying, assured the speaker that there was no guile in this *ad hoc* committee's action and that no decision would be taken until after the survey. J. Mackay Lewes, Thurston Williams, John Smith and Hugh Morris all expressed alarm at the implications of this report and Mr. Butterell put a motion, seconded by John Smith, that the council's report be accepted, subject to the council reporting all facts on the two-tier issue to members and calling a special general meeting. After the president had pointed out that such a motion suggested no confidence in the council and Guy Oddie, speaking as one who was "never perturbed about embarrassing the council," supported the President, Mr. Butterell withdrew his motion.

The next question raised was whether any more architectural schools were needed and the council was asked what was being done about ensuring the quality, recruitment and training of teachers. Chairman of the Board, Edward Mills, replied that a long programme of courses for teachers was being tested and he hoped more amplified and extended courses would be planned.

Jeremy Mackay Lewes, a past president of BASA, asked why there was no one on the council who could speak for students and suggested that it was the council's responsibility to get the students' views. The point was noted.

Hillary Chambers, President of BASA, asked the Library Committee if it had considered imposing a minimum standard for architectural school libraries. Robert Townsend, chairman of the Library Committee, replied that they had had three conferences for libraries.

Another question raised was whether the RIBA gave enough attention to the teaching of architecture in secondary schools. W. G. Howell replied that Miss Bromley had been trying hard to tackle this problem.

BULL RING

Birmingham's New Shopping Centre

A shopping centre of ingenious layout, conventional structure and slick appearance, was announced last week for Birmingham's Bull Ring market place, and Laing Development Company began work on the £5 million scheme on May 15, and expect shopkeepers to be doing business by 1963.

Chief architect is S. Greenwood, A.R.I.B.A., in association with S. J. Hirst, A.R.I.B.A. Greenwood was set the task of housing existing general and fish markets, rehousing a Woolworths without interrupting its sales, and keeping pedestrians off the ring road. His solution provides bridges and subways for walkers and makes clever use of the site's 50-ft. cross fall.

Structure on a 30 ft. × 20 ft. grid will be reinforced concrete cast *in situ*. External cladding on prestige façades will be marble tile: Norwegian quartz elsewhere. Internal partitioning will be of concrete block.

Air conditioning will heat the whole centre to 65 deg. or cool it to 5 deg. below outside temperature. The development company says top coats will be unnecessary. There will be cloakrooms near the entrances.

On the lowest floor (street level on the south side) will be a 16-ft.-high delivery dock for lorries bringing goods to 140 small shops and two large markets above. Service lifts will carry the stuff up to service corridors running behind all the shops.

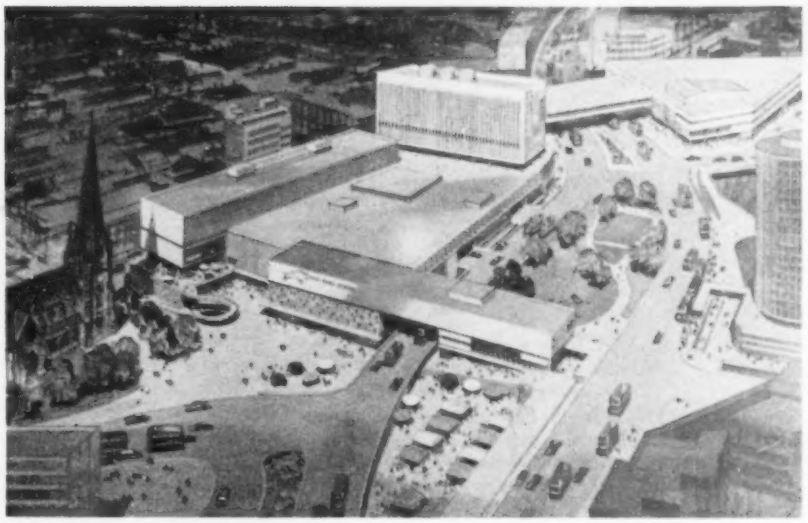
In the main building, shops and markets will be on two floors linked by escalators and separated by a sandwich floor for cars. This floor will be at street level on the site's north side. Shoppers will be able to drive off the ring road into the middle of the centre and have their cars mechanically lifted and parked in a four-deck, 500-car, public garage. There will also be a seven-floor office block with an advertising façade. Across the ring road (bridged by three 148 ft. steel Vierendeel trusses) will be a department store above a bus station. Further covered walkways will extend to New Street Station.

Laing sent Greenwood to glean what he could from American shopping centres. He went to Los Angeles, saw Victor Gruen, the archpriest of streamlined suburban shopping towns, and asked for wisdom. Gruen stressed the importance of visual variety and pedestrian flow and the error of having too many entries. Gruen said, "Go and see my mistakes!" Greenwood saw them and has tried to arrange concourses to sweep diagonally across the shopping centre ensuring that no shopfront opens into a backwater.

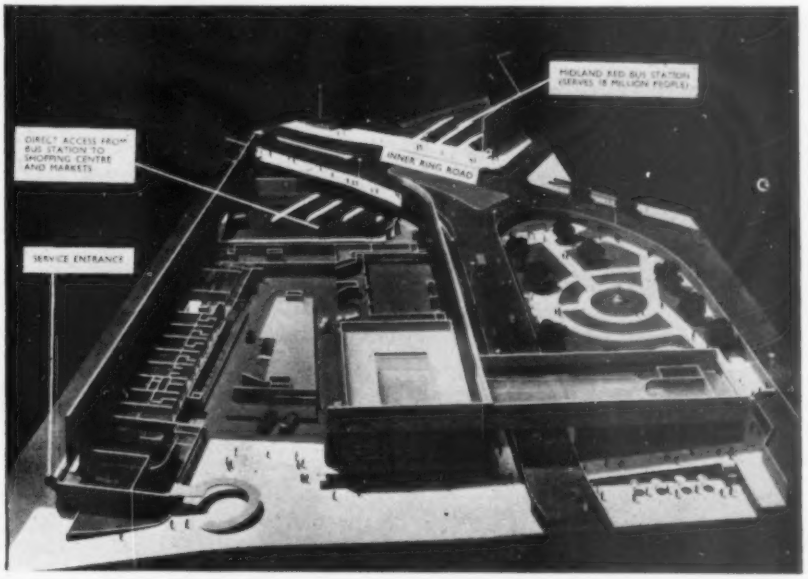
"People must not be allowed to take short cuts," he said. "The concourses they use cannot be more than 30 ft. wide and must have shops on both sides." This could be called the Burlington Arcade principle and although not new is none the less valid.

Bull Ring arcades will have the additional attraction of subdued lighting and piped music, which is expected to relax walkers down to a profitable pace of 1½ m.p.h.

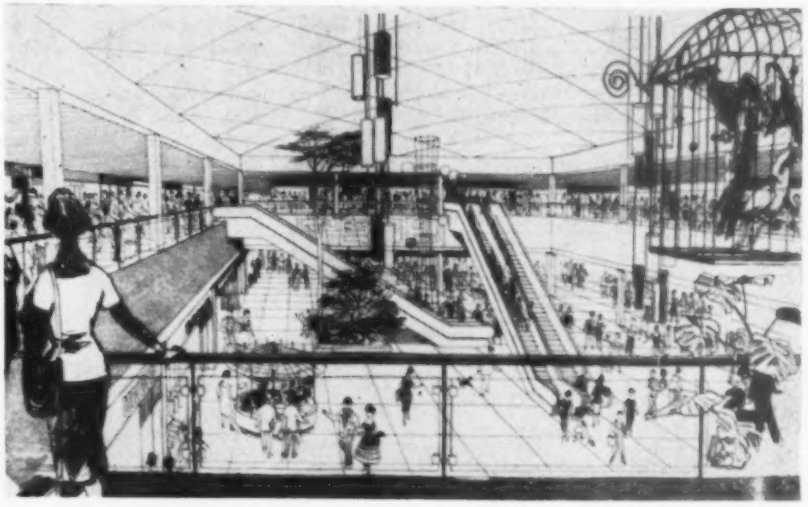
T. B.



Above, general view of the Bull Ring redevelopment, related to existing roads and landmarks in Birmingham with covered shopping area in centre, and open market in foreground, below raised traffic road



Above, model of the scheme with the lid off, showing circulation system for traffic. The covered shopping area is entirely for pedestrians. Below, view of the covered shopping area, the two levels linked by escalators

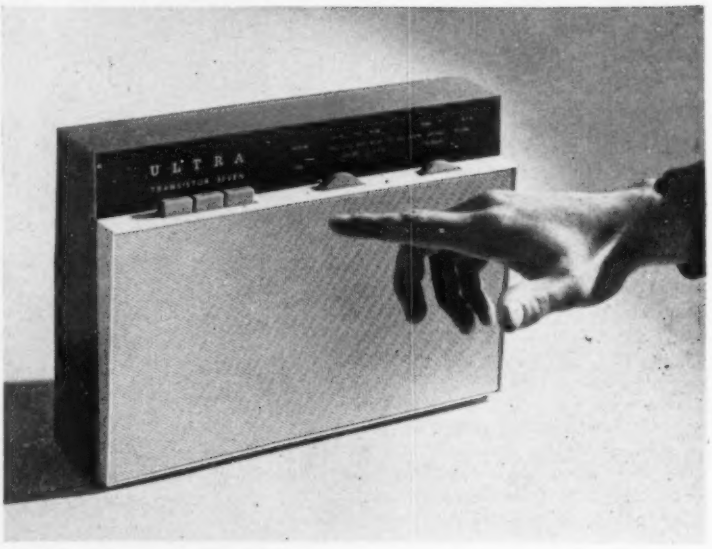


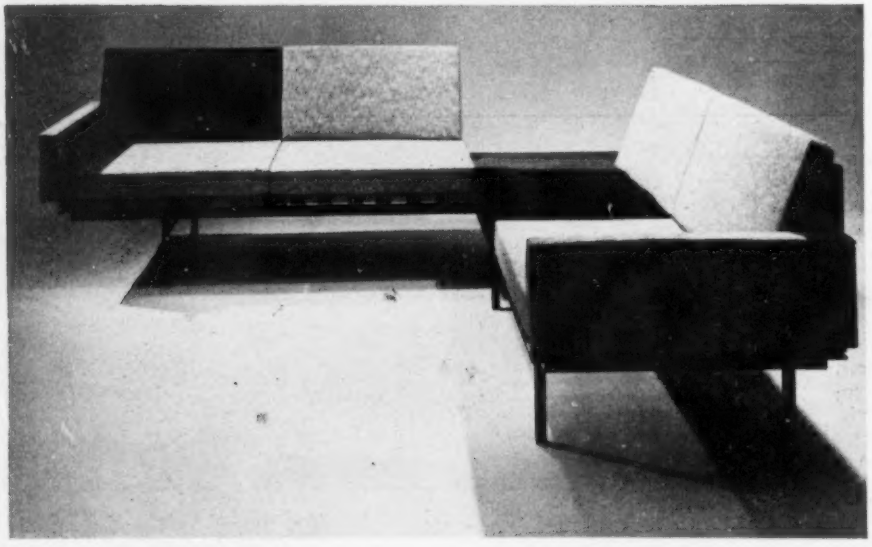
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Design Centre Awards

Transistor Radio wins 1961 Elegance Award

The Duke of Edinburgh's Prize for Elegant Design was presented yesterday at the Design Centre to Eric Marshall, FSIA, for the TR70 portable transistor radio made by Ultra Radio and Television Ltd., The model chosen, which is shown on the right, has a grey, black and white cabinet in high impact polystyrene, with an expanded aluminium grille. The judges comment a "good modern solution to an entirely modern piece of equipment"



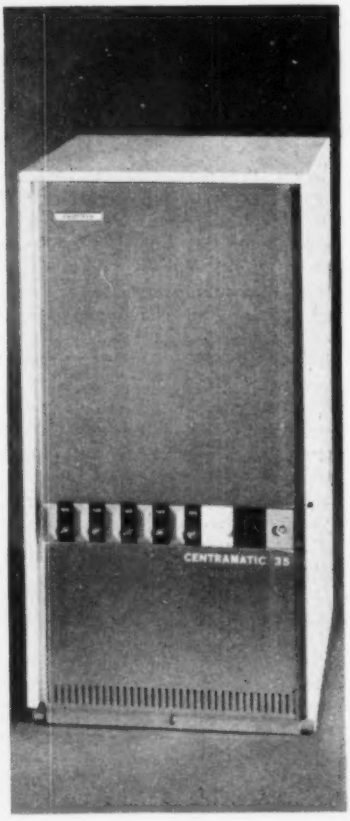


The Design Centre Awards for 1961 include this "Form" unit furniture, (above) designed by Robin Day, R.D.I., A.R.C.A., F.S.I.A., for Hille & Co., a flexible range of seating designed in 2 ft. 4 in. units, with black finished steel base frame, plastic feet, and seat units (with or without back rests or end arm units), in makore with foam cushions with zip-on covers supported on rubber webbing. Chosen as being "a neat, straightforward and unpretentious design in which detailing had been particularly well considered. It succeeds because it becomes part of the architecture of a home rather than a piece of furniture."



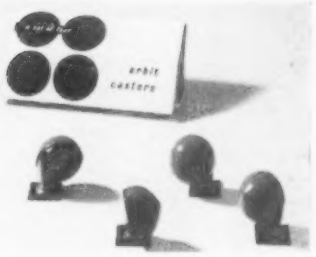
The "Cormorant" folding outdoor chair, designed by Ernest Race, R.D.I., F.S.I.A., for Race Furniture Ltd. (left) was chosen for its attractively "robust appearance . . . workmanlike use of materials . . . strength without clumsiness" and "surprising comfort."

The Redfyre Centrematic 35 oil-fired boiler, *designed by Newton, Chambers & Co. Ltd., in association with Brian Asquith, A.R.C.A. (below), is a fully automatic oil-fired domestic boiler. Chosen for being "designed as an architectural component that could be related to other kitchen units . . . there is an instrument-like precision in the design of the front panel."*





Adjustable Spotlights *(left), designed by John and Sylvia Reid,* A/A.R.I.B.A., F/F.S.I.A., *for Rotaflex (Great Britain) Ltd.; a range of lighting fittings designed to take any size of lamp up to* 150 *watts on a universal, swivelling bracket common to ceiling, floor and wall mounted versions, the sliding action of the body allowing for a variety of lamp positions, with a locking device for holding at any angle. Chosen for "extreme simplicity of the design and sensitive use of materials and finishes.*

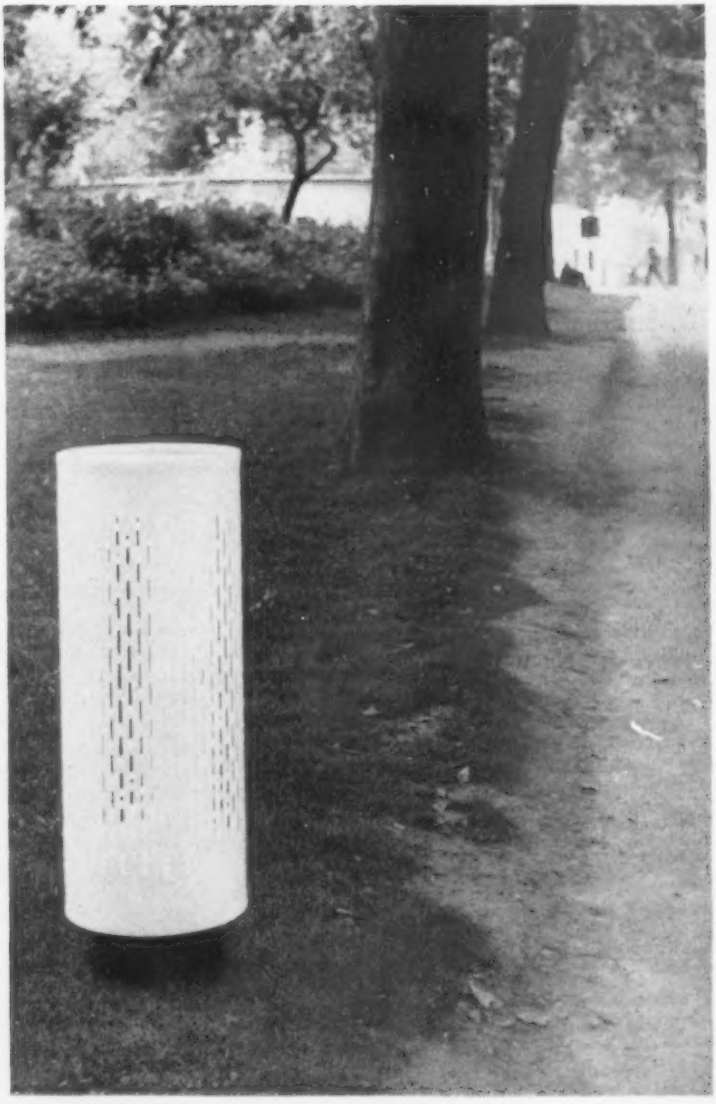


Orbit furniture castors, *designed by Joseph Gillott & Sons Ltd., in conjunction with R. David Carter,* M.S.I.A., *made of zinc base alloy and mild steel with stove enamelled finish, enclosed bearings and sealed-in lubrication: "such small components are of importance and are often overlooked . . . often the appearance of a chair is ruined by ugly castors."*

(*Right*) *the* Town Number One litter bin, *designed by Derek Goad and John Ricks of Donald Forrest,* A.R.I.B.A., *for G. A. Harvey & Co. (London) Ltd., a cylindrical bin of perforated sheet steel, chosen because "it is not only attractive to look at and easy to clean but lends itself to use in a wide variety of situations."*

Paragon chemical closet, *designed by Martyn Rowlands,* M.S.I.A., *for Racasan Ltd. (below), comprises a single high density polythene container, with stainless steel handle and detachable seat and lid. Chosen as "an excellent illustration of how a type of product normally considered too mundane to be worth bothering about is, in the hands of a good designer, capable of being turned into a pleasing and practical article."*





RIBA

Pevsner's Penguins

Prof. Nikolaus Pevsner entertained the RIBA Library Group on May 2 with an account of the trials and tribulations of compiling the Penguin "Buildings of England" series. This and the Pelican History of Art were, he revealed, the fruit of a single weekend's conversation with Sir Allen Lane.

Germany, where an inventory of buildings has been in progress for 90 years (450 volumes so far), was the inspiration. Professor Pevsner, however, hopes to finish 50 volumes on England in 20 years: "You have to make up your mind to do it badly or not to do it at all."

The guides cover everything visible from Stonehenge to Festival Hall and are unique in their serious coverage of the 19th century. Professor Pevsner has two assistants but is the sole arbiter of "art historical attitude." Having decided that the series should not be just an inventory but contain judgments, he concluded: "the only possibility is to visit all the buildings myself."

The Leverhulme Trust now subsidises research for the guides. This has two main parts: a thorough combing of libraries in London and the counties, and field work. Professor Pevsner spends his university vacations making exhaustive six-week journeys into rural byways. "After that I am grateful for any church that gets bombed out."

"Surrey is pure hell. The research tools that sufficed elsewhere were useless. Every house is hidden by rhododendrons. There are no names." As a result, 80 per cent of that county has been done by Ian Nairn. In some other volumes Professor Pevsner will do ecclesiastical architecture, leaving domestic buildings to a colleague.

Only one completely unrecorded building has so far been uncovered—a country house in Somerset. Professor Pevsner passed its gates by chance in a car. "It looks good, but it must be a fake." The owner, however, confirmed that it was Jacobean and asked why he would be living in a fake house.

Professor Pevsner described the experience he has gained in criticising recent buildings. Once he dismissed something modern as a monstrosity. "The architect came to Penguins' with a horse whip—he is the only architect I know who owns racehorses." Since then all monstrous buildings have had their monstrosity explained.

T. B.

RSA

Industrial Art Bursaries Exhibition

The 1960 competition for industrial art bursaries organised by the Royal Society of Arts drew 726 entries, covering all fields of industrial design, but broken down into categories for judging. Forty of them won travelling bursaries, totalling £4,825, for their designers, and the cream of the entries will be on show at the RSA in John Adam Street, Adelphi, until May 19.

Several of the designs are intelligent, simple and original: outstanding, a toaster, an open coal burning stove for a sitting room (unfortunately particoloured), decorated glass panels, a magazine format, women's clothes and TV settings.

What has been handled least well is colour. The carpet designs are uniformly lurid. Competitors were set by the RSA to reinterpret the floral patterns traditional in English carpet weaving. Since nothing better than blowsy fruit salad resulted, perhaps the RSA could start a new tradition next time.

In furnishing fabrics too, the jury seemed to be drawn like a bull towards any splash of brilliant colour: their comment on a stylised floral pattern by Sandra Schofield of Bradford done in three colourways (gold-olive, saffron-brown and dark-blue with grey-green) was ". . . it is unfortunate her designs had been spoiled by rather dreary colour."

William Morris used the same dreary colours, and what a relief they were when crimson plush had held the field in every Victorian drawing room. It is a pity if the RSA withholds its patronage for this important part of the spectrum.

LIVERPOOL UNIVERSITY

Honorary Degree for Holford

Sir William Holford is to be made on Honorary LL.D. of Liverpool University when a special Congregation confers eight Honorary Degrees in October, to mark the bringing into use of its new buildings for Mathematics (with Oceanography) and Veterinary Science. He is a graduate of the University.

His fellow LL.D.s will be Lord Birkett and Sir Geoffrey Crowther.

LCC

New Survey for London

A complete town planning survey of the County of London, similar to that made in 1947 which formed the background to the 1951 Development Plan, is now under way, and in the next 18 months, 25 LCC surveyors expect to visit over a million houses, flats, shops, offices, factories, etc. working their way systematically across London from Hammersmith to Woolwich.

BARBOUR INDEX

Extended Service

Barbour Index announce the extension of their technical information service for architects to the West of England. During June architects in the Bristol and Bath areas will receive their libraries of building manufacturers' technical catalogues. These libraries are classified and indexed, and will be personally serviced every four weeks to keep all the information up to date. The service, which began in London three years ago, also covers the Midlands and the North of England.

YORK UNIVERSITY

Open by 1963?

Architects for the new University of York are Robert Matthew and Johnson-Marshall of London and Edinburgh it was announced recently by the chairman of York University Promotion Committee, Dr. Ramsey, Archbishop of York.

Provided sufficient accommodation is made available in York pending the construction of new building, the university will be able to open its doors in 1963.

It is proposed that the York Institute of Architecture will be incorporated within the university.

ROSPA

Safety Award for John Laing's

The National Industrial Safety Committee of the Royal Society for the Prevention of Accidents has announced that the Sir George Earle Trophy for 1960 has been awarded to John Laing Construction Ltd., "in recognition of this company's practical and highly successful approach to the problem of accident prevention in the difficult conditions inherent in building and civil engineering work."

It was decided to restrict the 1960 award to the construction industry, because of the rising accident rate in the industry, which recorded 20,318 injured and 278 killed last year.

Mr. W. Kirby Laing, chairman of the company, received the trophy at the National Industrial Safety Conference at Scarborough on May 12.

DIARY

Cotton Furnishing Fabric Designs: Exhibition of 300 best designs submitted for House and Garden Design Award at the Cotton Board Colour Design and Style Centre, York Street, Manchester.

Until JUNE 2

Elephant and Castle: Erno Goldfinger describes and illustrates the LCC scheme at the I.C.A., Dover Street, London, W.1, at 8.15 p.m.

JUNE 1

Automation and Architecture, The Contribution of the Designer to Management Efficiency: Lecture by Gordon Friesen, for the Yerbury Foundation at the RIBA, at 6 p.m.

JUNE 1

THE INDUSTRY

This week Brian Grant describes aluminium roofing data sheets, a prefabricated timber truss, a ceiling panel and a solid fuel boiler.

Aluminium Roofing

A recent publication from A.D.A. which deals with aluminium corrugated and troughed sheeting contains some useful drawings of fixing methods and other details such as flashings and fixing methods. The publication is not intended to be a design text book and confines itself to loadings, pitch, laps and the choice of appropriate profiles. (*The Aluminium Development Association, 33 Grosvenor Street, London, W.1.*)

Prefabricated Timber Truss

The Tecton division of Dexion has evolved a timber truss laminated with weather resisting glues from 4 by 1½ in. planed timber. It is claimed to be considerably stronger than the normal truss. The truss is delivered to site in two main sections, is assembled by bolting up the bottom tie bar and nailing a collar, and costs less than the two orthodox trusses it is designed to replace. Standard pitches are 22½, 30 and 35 degrees, with spans up to 36 feet. No change in technique is necessary, as the roof construction remains normal. (*Dexion Ltd., 65, Maygrove Road, Kilburn, London, N.W.6.*)

Dexion laminated timber roof truss



Multi-purpose Ceiling Panel

The Versa-Tile is a new ceiling panel which can be supplied with a number of different facing materials and with or without filling, to meet a variety of ceiling requirements. All variations of the tile have a Z section pressed steel frame with the corners of the upper flange omitted to leave a hole for fixing. There are three types of tile, for thermal insulation, for insulation and sound absorption, and purely decorative. The insulating and decorative panels can be faced with plain or leathergrained hardboard, plain or painted, or with a p.v.c. finish, the insulating panel being filled with 1 in. of mineral wool. The thermal-acoustic panel is made in an incombustible form with a fine mesh perforated metal sheet welded to the frame, or the frame may be faced with perforated or slotted hardboard, both types having the mineral wool filling. The panels are either 20 or 24 inches square, though other shapes and sizes can be made, and are fixed to battens or channels on the ceiling, or to a rigid suspended grid. Individual panels can be removed by unscrewing the cross plates at each corner. The tiles, among a number of other ceiling finishes, are described in a new and well arranged loose leaf A4 size catalogue, well produced, informative and factual, as well as being ready classified on the SfB system. (*Bowater Sales Co., Ltd., Building Products Division, Bowater House, Knightsbridge, London, S.W.1.*)

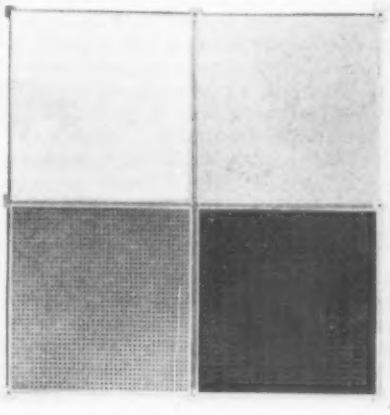
Solid Fuel Boiler

The latest addition to the Trianco range of boilers is the P65 solid fuel model with an output of 65,000 B.t.u. per hour. It has a large gravity feed hopper which holds enough fuel for up to 24 hours in winter, and for much longer in summer, the fuel used being anthracite grains obtainable under the small anthracite supply scheme. Forced draught is supplied by a thermostatically controlled fan, and declinkering is carried out by the side lever, with all the doors closed. A range of stove enamelled colours is available, but it would be an improvement if the doors were the same colour as the body and there were only one name badge, which could even be tolerably designed. (*Trianco Ltd., Imber Court, East Molesey, Surrey.*)



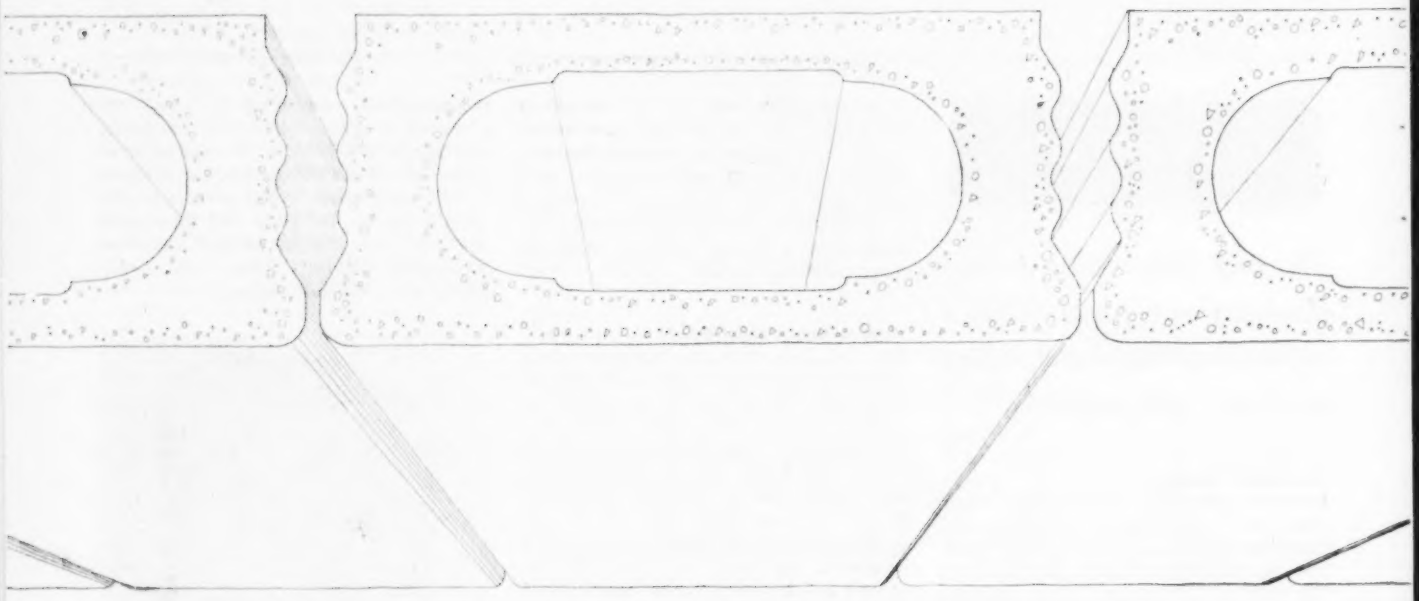
Trianco P65 solid fuel boiler

The Versa-Tile ceiling panel



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Two current contracts on which these new Bison units are being used:

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INFORMATION CENTRE

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(94)
725·5

10.210 design: building types
HOSPITALS

RIBA Hospitals Course Handbook. Published by the RIBA Technical Information Service. Price 36s. 6d.

Architects who attended this course (held last July) will have taken away with them an impression of a useful but uneven event. Some of the papers were intolerably dull, some were entertaining but of no lasting value and some—notably those of Brigadier Welch on Work Study and L. W. Plewes on the Accident Service—were excellent. In this sumptuous reprint good editing and good typography do much to correct this impression of unevenness. The volume as a whole is useful background reading for an architect who is new to hospital design.

Fg

16.131 materials: miscellaneous
PERFORATED BRICKS

The Strength of some Perforated Bricks. The Brick Bulletin. March 1961. Vol. 4. No. 7.

On the Continent there is a widespread use of perforated clay bricks and hollow clay blocks for work that in this country would be done with solid bricks. Although hollow clay blocks are commonly used for partitions in this country, there is often a prejudice against perforated bricks. The prejudice, based on the belief that a perforated brick has a crushing strength lower than that of a wirecut solid brick of the same material and fired in the same way, carries little weight against the experiments recorded in the Brick Bulletin. The Bulletin maintains that the act of forming holes in the clay column increases compaction of the clay in the webs, giving a denser structure. Furthermore, the holes allow a more even distribution of heat during the firing process. In fact, it is shown by experiment that it is possible to obtain even higher crushing strengths of some perforated bricks than those of equivalent solid bricks made in the same way.

The experiments to investigate the relative strengths of solid bricks and two types of perforated bricks are reported in detail giving a clear picture of their structural qualities.

The bulletin should be read in conjunction with BRS Digest No. 53, April 1953, "Perforated Clay Bricks." It also refers to a further bulletin that will be devoted to an investigation into some high buildings on the Continent in load-bearing brickwork of perforated bricks.

(47) Ln2

19.230 construction: details
FELT ROOFS

Built-up Felt Roofs. Building Research Station Digest. (Second Series) No. 8. HMSO. 3d.

This is a most interesting publication in connection with the use of bitumen roofing felt as roof covering. It is particularly concerned with various types of felt with asbestos and fibre bases. It investigates the success and failure of past years, explains the reasons for the defects and recommends methods by which they can be overcome. The recommended precautions will be included in a revised issue of the British Standard Code of Practice for Bitumen Felt Roof Coverings (CP.144.101:1952).

The Digest draws attention to problems resulting from movement of sub-structure, entrapped moisture and condensation. The effects of exposure and the angle of slope are considered, and types of felt are recommended for particular circumstances. Fire protection is discussed, pointing out that the degree of fire protection afforded depends upon the roof structure as a whole. With a suitable choice of decking, felt and surface treatment a high grading against fire hazard can be achieved.

Roof construction using felt roofing is covered extensively, including nature of sub-structure, fixing, finishes, and treatment of defects. The Digest is illustrated by sketch details and the information is clearly presented. It gives a comprehensive picture of the problems involved and will be a useful guide to architects.

(52)
696·12

25.137 water supply and sanitation
PLUMBING TEXT BOOK

The Practical Plumbing Guide, by James M. Haig. Stanley Paul & Co. Ltd. Price 21s.

This book sets out to be of use to architects, plumbers, and householders in the sphere of domestic plumbing.

It deals with hot and cold water supply, sanitary fittings, waste and soil installations, rainwater disposal, and a few pages are devoted to roof weathering and improvement grants. The selection of subject matter and the allocation of space give some cause for surprise. The chapters on cold water installation and the soil and waste system together occupy approximately the same space as the chapter on water softening. A chapter on "Small-bore Heating" is included although no other information about space heating systems is given. This is particularly disappointing since a simple explanation of a small gravity system might be useful to many householders.

There are some surprising omissions. Indirect hot water systems are only mentioned in connection with small bore heating. "Primatic" and other patent indirect cylinders are not mentioned, nor are B.R.S. Ball Valves. Only capstan headed taps are mentioned although householders will be interested in other patterns which are easier to dismantle and re-washer. There is no bibliography. The explanations are, however, very clear, and in spite of the omissions it is likely that most householders would gain greatly in their understanding of plumbing as a result of reading this book. It is a pity that the price of 21s. may restrict its circulation. Some technical data are given. The information on the design of domestic boiler hot water systems to suit electric immersion heaters is very detailed, as is the information on electric water heaters and water softeners, but generally the technical information provided is illustrative and not sufficiently comprehensive to form a working reference for the design or specification of plumbing installations.

Architects, as a result of their training and experience, will be familiar with the general principles covered by this book, and where problems arise in practice they will wish to consult the more comprehensive and detailed technical references.

(12)
696·13

25.138 water supply and sanitation
DRAINS

Drainage for Housing. Building Research Station Digest (Second Series) No. 6. HMSO. 3d.

Four Digests on drainage have been issued since 1953. This is indicative of the changes in theory and practice that have developed as the result of research and with the introduction of new materials. This Digest supersedes Digest 55 and should be read in conjunction with Digests 124, 125 and 134 (concerned with the design and construction of "Small Underground Drains and Sewers"), and B.S. Code of Practice 301 "Building Drainage."

The Digest proposes economies in layout such as the use of "private sewers" in grouped housing, minimum use of manholes and adoption of rodding eyes for changes of direction and gradient. It recommends that the relationship of gradient to size of drain should be based on flow load once this factor can be assessed. Materials suitable for pipes, jointing and bedding are considered and the Digest draws attention to problems caused by acid elements in the soil, "backing up" by detergents, and interference caused by tree roots. Granular bedding for pipes is considered in detail. Construction methods are outlined including excavation, support and protection, connections, backfilling, testing, and construction of manholes. Reference is made to Digests 124, 125 and 134 for further construction details.



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UDC No. 725·5

10 DESIGN: BUILDING TYPES

Audio-visuality in hospital ward design

We publish this week an article by Dr. Hugh Gainsborough, a one-time chairman of the Medical Planning Committee and, until recently, Senior Physician at St. George's Hospital. Dr. Gainsborough, who discusses the question of ward planning, considers that the patient *can* be given full privacy while still being in the nurse's view and that both criteria must be respected.

The proposals of the Ministry of Health for increased capital expenditure on hospitals over the next ten years and the appearance of Building Notes from the same source may have fired the imagination of architects and hospital planners, but a closer look at the present situation is disturbing, for three reasons. First, we are in a period of rapid change and development when the immediate future even in limited fields is hard to foretell: medicine is advancing rapidly in certain directions, the requirements for psychiatry and social medicine are not well seen, changes in nurse training and employment are occurring, and there must also be development in the relation between hospitals and local authority functions on the one hand and with general practitioners on the other. The second difficulty is the relative standstill in hospital design in this country, coupled with a lack of knowledge as regards the functioning and maintenance problems of "modern" and modernised hospitals. Third, there is a lack of understanding of the patients' personal and human requirements, and we all tend to judge these according to our political bias or to our appreciation of economic needs rather than from a study of the problems amongst the patients themselves. Some of these difficulties I have briefly described elsewhere.[1, 2] In the Ministry of Health Building Note 1 (V. Design in Use) there is immediate reference to our ignorance of the performance of new buildings and the suggestion is made that there should be a regular series of reviews of such buildings as soon as possible, the teams making these investigations to use a standard method not yet defined. The value of such investigations will be limited unless the planners get away from the safety of slow development. But before more imaginative plans can be produced there are certain real problems to be tackled so that the planners can know what they are aiming at and new experimental set-ups may be needed for *ad hoc* testing.

If we look at the general approach to hospital architecture we immediately see a difficult client/architect relationship. Despite its multiplicity of function the main purpose of a hospital is the care of patients by doctors and nurses[3]—unfortunately, relatively few of these two latter groups have had the time or inclination to interest themselves in the total organisation required to provide the conditions for this main and central purpose. The clients naturally are the Boards of Governors and the Regional Boards acting for the Ministry through their permanent staff officials, lay administrators and doctors mainly trained in public health work who do not see or look after the patients. It can be difficult to consult with the medical staff of the hospitals because of the limited knowledge of their own and their colleagues' requirements, together with their curious blend of anarchism and conservatism. Nursing staffs contribute very little to hospital planning, partly because of excessive traditionalism and partly due to their disinclination to study the logistics of nurse staffing except on a sort of trial and error basis. The load on the administrative doctors and on the architect is perhaps too heavy to allow scope for the more imaginative approach, for every medium or large size hospital has not only its complex central purpose in relation to patients but is also a polytechnic for the training of nurses and paramedical and administrative staff; it is also an hotel as well as an institution which must increasingly ramify into the surrounding community.

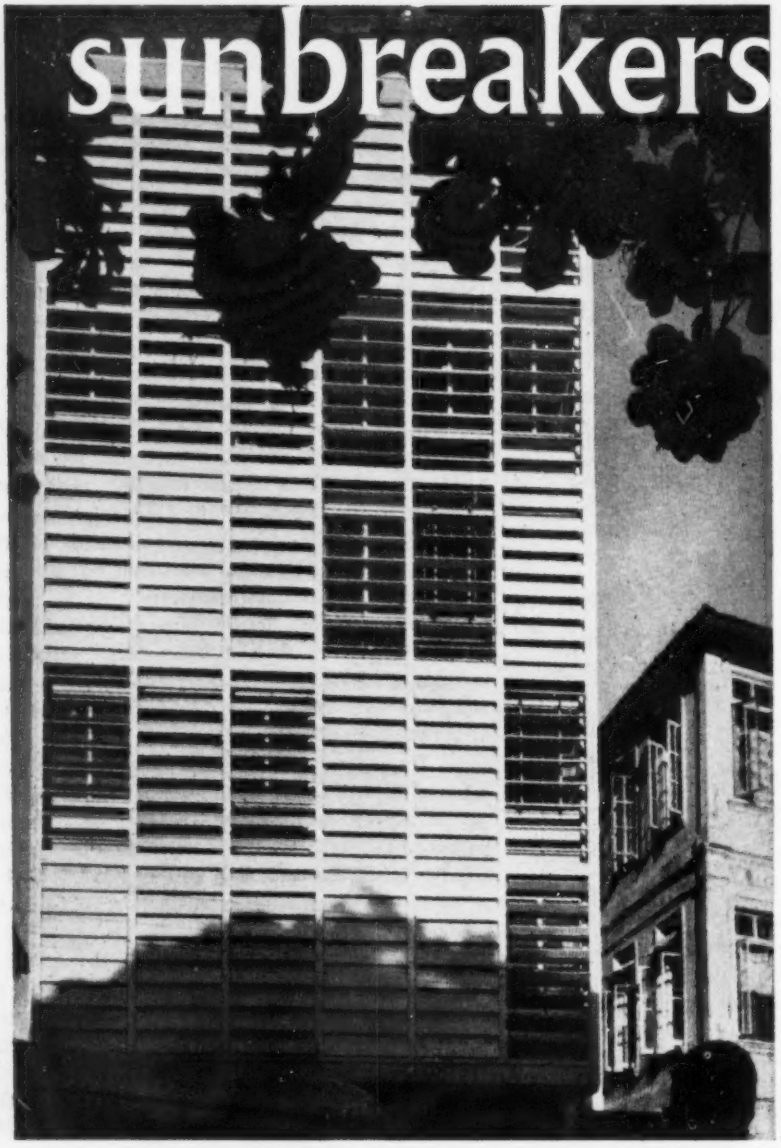
At a recent meeting Dr. E. Rosenfeld, the American authority on hospital ward planning, expressed the view that it is time we achieved some standardisation of our hospital plans, but here I must differ from such a respected authority on the grounds that we have not a fraction of the American experience and that we cannot absorb their experience without careful study of the entirely different conditions in the two countries.

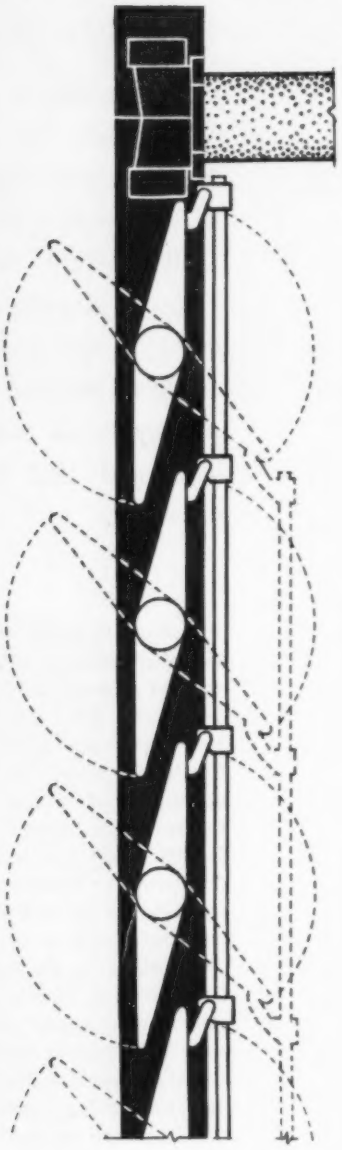
Circular Ward Study

We must learn from the Americans and I wish to comment on a valuable study, despite its being marred by the elaboration of the obvious. The book is entitled "A Comparison of Intensive Nursing Services in a Circular Ward and a Rectangular Unit at the Rochester Methodist Hospital, Minn.," by Madelyne Sturdavant, *et al.* This experiment cost $250,000, together with large contributions from interested firms.

[1] *British Medical Journal*, 1960, 2, 937.
[2] *Nursing Times*, 1960, 56, 1501.
[3] This might be over-simplification, *vide* The Doctor's Place in the Patients' Hospital. S.T. Hayward. *Lancet*, 1961, i, 387.

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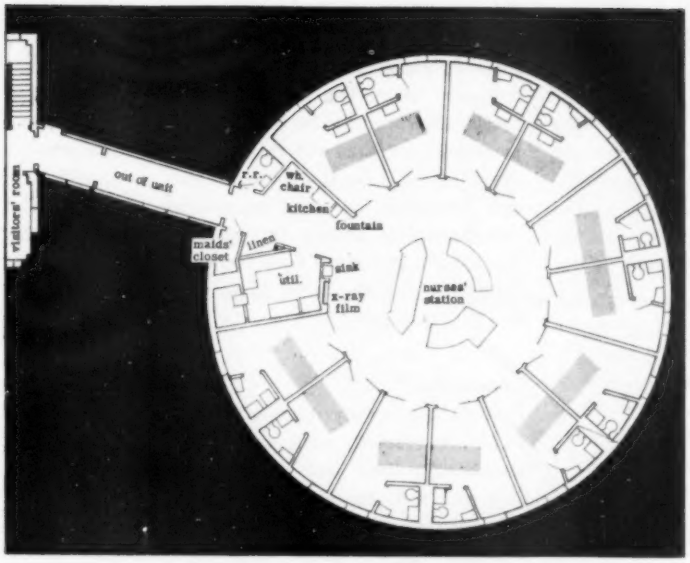
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technical section



Plans of the rectangular and circular ward units which were used for the Rochester experiment



The circular ward, containing twelve individual rooms, was a well-built temporary structure, each room had its own toilet facilities against the perimeter, and the doors to the central area were fully glazed. The central interrupted circular nurses' station was designed to give maximum visibility between nurses and patients, the ancillary facilities were cleverly and compactly designed, and of course there was a full communication system. The rectangular ward provided an entirely unfair set of conditions. The toilet facilities of each room were against the corridor wall, and from the plan it is apparent that the patient's head could not be seen from the corridor. The nurses' station was a make-shift one in the corridor, and there was really no mutual visibility possible between nurses and patients even when the room doors were wide open. It inevitably follows that the details of the Rochester Report provide dull reading because any study of the plans would naturally reveal the different efficiency of the two units. Despite all this some very important conclusions can be drawn from this report as regards the extremely satisfactory working of a well-designed, intensive nursing care unit used for immediate post-operative cases staying an average of three to four days, without the intermediary of a recovery unit in the theatre suite. The success of this unit as judged by patients, nurses and doctors, was due to its compact design, the availability of treatment and toilet facilities in each room, and the entirely satisfactory audio-visual contact directly between the patients and the nurses at work. (In case any architect fears that circular wards might presage gasometer-like structures, might I recall Mies Van der Rohe's sketch for a sky-scraper *circa* 1920.)

Privacy: the Case for Single Rooms

There is, I think, a very important lesson to be drawn from this Report and this is in relation to general ward design and the provision of audio-visual contact in sub-divided wards. When, after the war, we belatedly gained some appreciation of the frankly indecent conditions of life in the open ward, many hospitals replaced a few portable screens in the ward by permanent curtains for each bed. But though it is now possible to sit on a bedpan behind curtains in an illusory type of privacy a new set of conditions has arisen and become intensified by the greater needs of modern medical practice. If we consider an open ward of, say, 24 beds with curtains drawn round three patients, a full team of nurses can become completely invisible either behind the curtains or in the ancillary rooms, and even a nurse in the centre of a ward can observe very few patients. In other words the audio-visual contact of the open ward can be very limited. A wise sister will often group her severely sick patients so as to counteract this loss of observability, a loss which only those who have worked in such wards can appreciate. For a long time now American and Continental hospitals have been built with wards sub-divided into small units, the largest being four-bedded but with many single- and two-bedded rooms, and the question must arise as to how far we can or should go in providing privacy for patients. I do not think this is the place for a full argument, though much of this problem has a general social import as well as a medical or nursing aspect. Let me say at once that if architects can provide wards solely of single-bedded rooms with adequate observation and with reasonable economy in nursing and maintenance, then I am in favour of all bedrooms being single-bedded. The arguments presented against such a concept are generally false. Those put forward by respected senior executives who have enjoyed their "slumming" in open wards, the human warmth and company of patients with whom they usually have so little contact, need not detain one. Most of us want

technical section

absolute privacy with safety, do not want strange visitors, or sometimes even friends and relatives during the period of acute illness. We are anxious to be up and about as soon as possible if there are adequate day-rooms, and to get home as soon as possible. Why should we lose our treasured privacy when we are really ill, or our sleep when we are convalescent?

There remain, however, two main arguments against the completely private ward system, and the answer to these can only be obtained by experiment in one case and by architects in the other.

The first criticism offered is usually delivered unequivocally to the extent that the greater the subdivision of the ward the greater is the nursing staff requirement. I do not believe this is true provided the ward is so designed that cases needing intensive nursing care are grouped for maximum audio-visual contact with a correctly sited nurses' station, that each room is designed to further this end, that each room is properly equipped for routine and urgent needs, that adequate toilet and washing facilities are provided, that the day-room is ample in size and design and under easy observation, and that an adequate intercommunications system be used. I would add a further proviso that the functions of utility and treatment rooms be carefully examined and these rooms perhaps abolished so that nurses do not disappear: it is much less labour for one nurse to move a treatment trolley to a patient's room than for two porters to move a bed out of a four- or six-bed cluster to a treatment room. But of course there are so many advantages which flow from the use of single-bedded rooms—the complete privacy during history taking, control of cross-infection, quiet, the maintenance of decency and dignity in dying, non-disturbance by other people's visitors, suitable ventilation and temperature for each individual patient, disinfection or cleaning of single rooms without closing whole wards, simplicity of arrangements during bed bathing and other toilet requirements, etc.

The second difficulty relates to the practicability of building such wards, providing all these facilities, at reasonable capital cost and economic maintenance expenditure.

Despite the criticisms of some of our more timid planners, a modern ward design should incorporate as far as possible the following three main objectives: (a) the maximum privacy as described above, (b) the functional division of the ward in accordance with the principles of progressive nursing care but without rigidity, (c) the inevitable adoption of central supply services for linen, sterile materials and instruments, and arrangements for rapid disposal of ward discards.

I have already mentioned the necessity of grouping the very ill patients requiring the first stage of progressive care. The second stage is generally considered as including those patients who are recovering but still need some observation and much nursing assistance. The third group includes the more ambulant patients who can help themselves to some extent and those cases admitted for investigation or needing dietetic treatment only. The difficulty of this sort of ward specification seems to be the avoidance of an expensive perimeter compared with relatively inexpensive internal space, and it is in this direction that we should seek new formulae for ward construction. It should be remembered in costing that single-bedded wards do not require the same floor to ceiling height as open wards—in the Rochester experimental unit an 8-ft. height was adopted.

Conclusions

I would sum up my opinion by stating that the main trend in hospital ward design should be towards increasing privacy and audio-visual observability but *that these should not be deemed in advance to be contradictory*.

I would suggest that the following researches should be proceeded with as rapidly as possible:—

(1) Estimate of the average distribution of cases in acute medical and surgical wards according to their progressive nursing requirements.

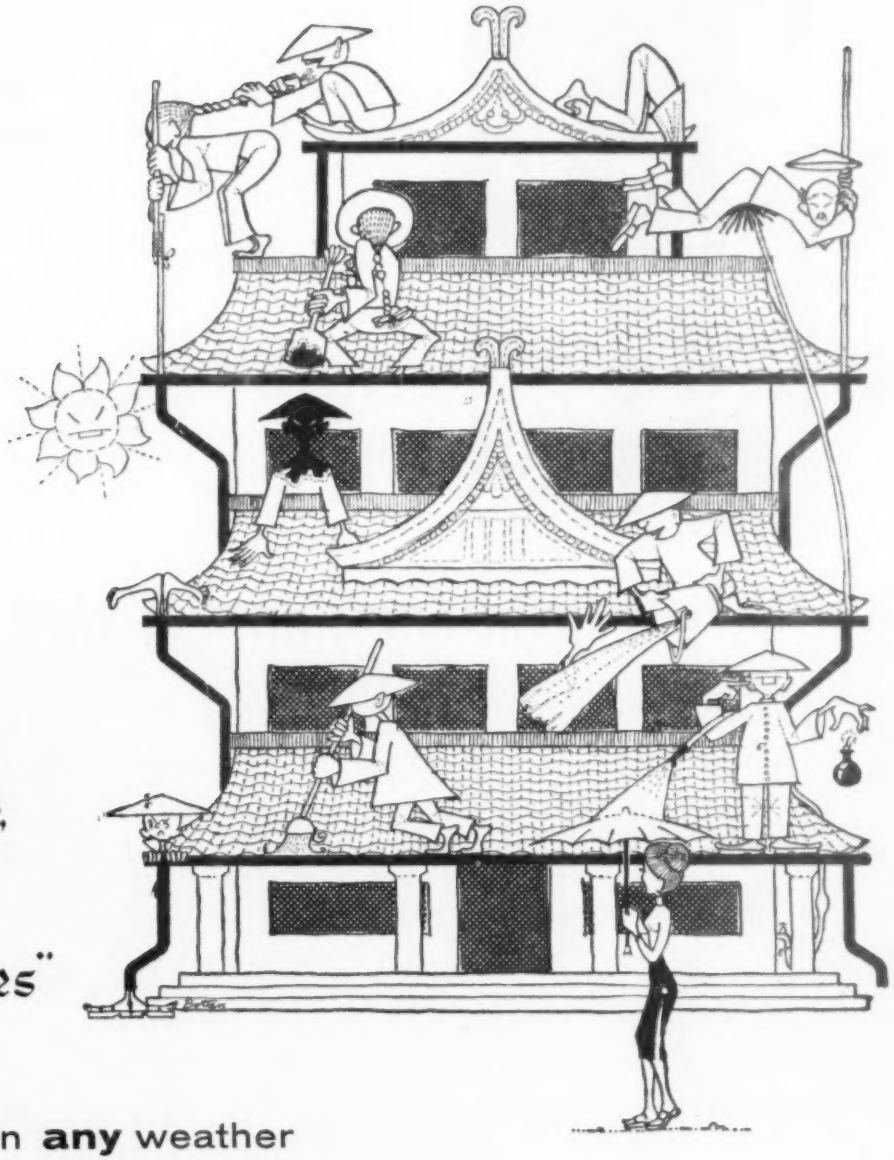
(2) The nursing requirements (and other labour requirements) of highly sub-divided units of good design compared with existing units. To start with, some early information could be obtained by a comparison at Altnagelvin, Musgrave Park and open wards elsewhere.

(3) The development of new ward designs in accordance with the findings of these investigations.

It is obvious that many more inquiries could be suggested, of immediate interest, for example, whether intensive nursing care within a surgical ward unit can replace the need of recovery units in theatre suites. From this point one might reconsider whether multiple theatre suites are necessary or whether it would be advantageous to sub-divide them between limited groups of surgical wards because central supply services and the non-provision of recovery wards might sufficiently simplify the theatre units.

As the Government intends to spend £500m. in ten years it would surely be sensible to spend, say, 1 per cent to 2 per cent of this figure in the immediate next years on experimental set-ups not only of ward units but to investigate other special functions such as day hospital facilities. The Hospital Building Note No. 4 of the Ministry of Health may be necessary for guidance in immediate and urgent projects, but it is utterly pedestrian and I can only hope it will be replaced by something which will give a more imaginative lead to architects and hospital planners.

Should anyone think that I am suggesting an impossible or impracticable rate of progress I can only suggest that he reads the comments of Asa S. Bacon on his plan for a new hospital in the *Journal of the American Medical Association*, 1920, 74, p. 123, for this 41-year-old vision has not yet reached us.



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HIDE PLACE DEVELOPMENT

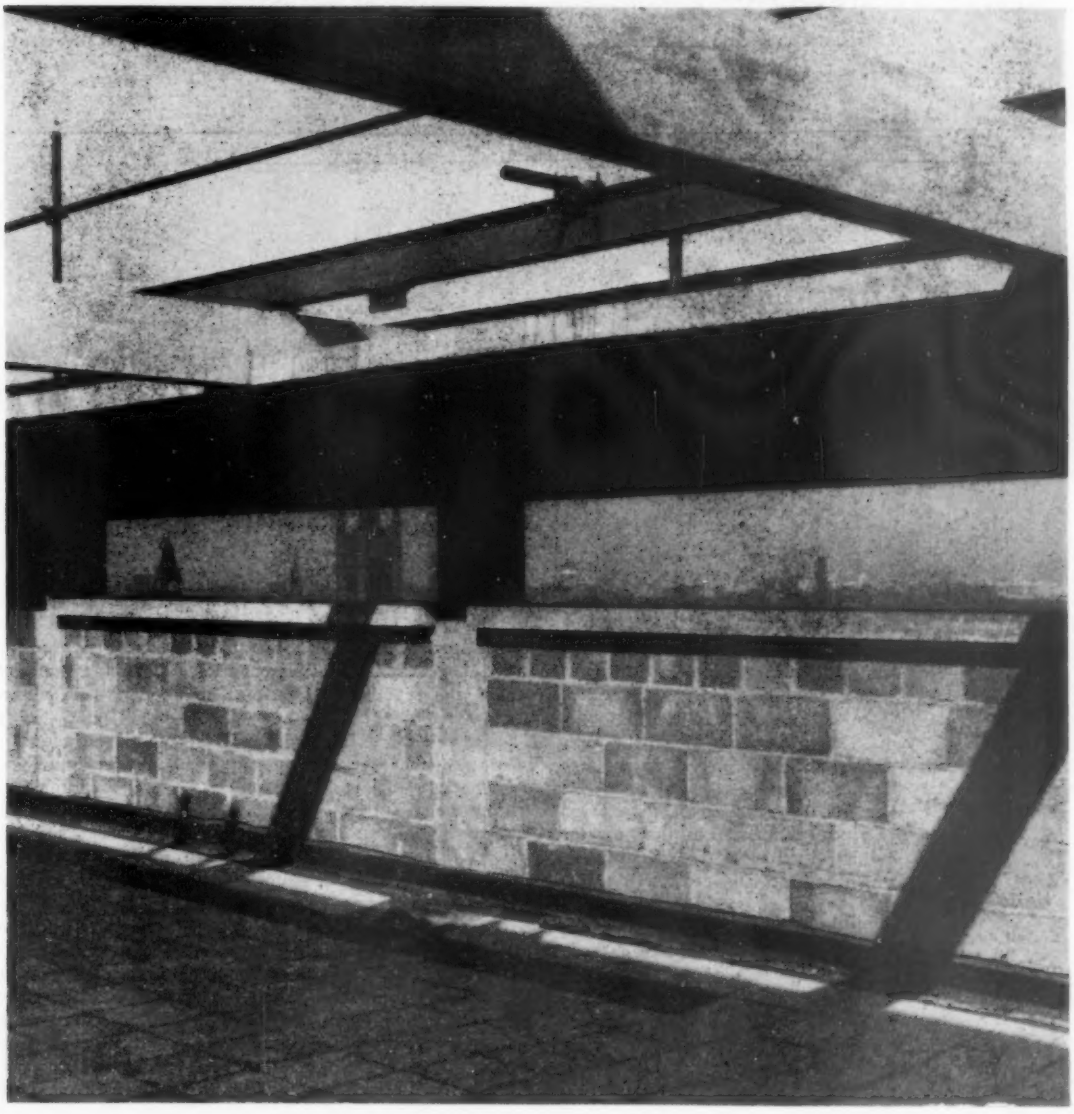
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The sixth of a series of progress reports. The other instalments appeared on June 23, August 18, October 20, 1960, January 5, and March 2, 1961

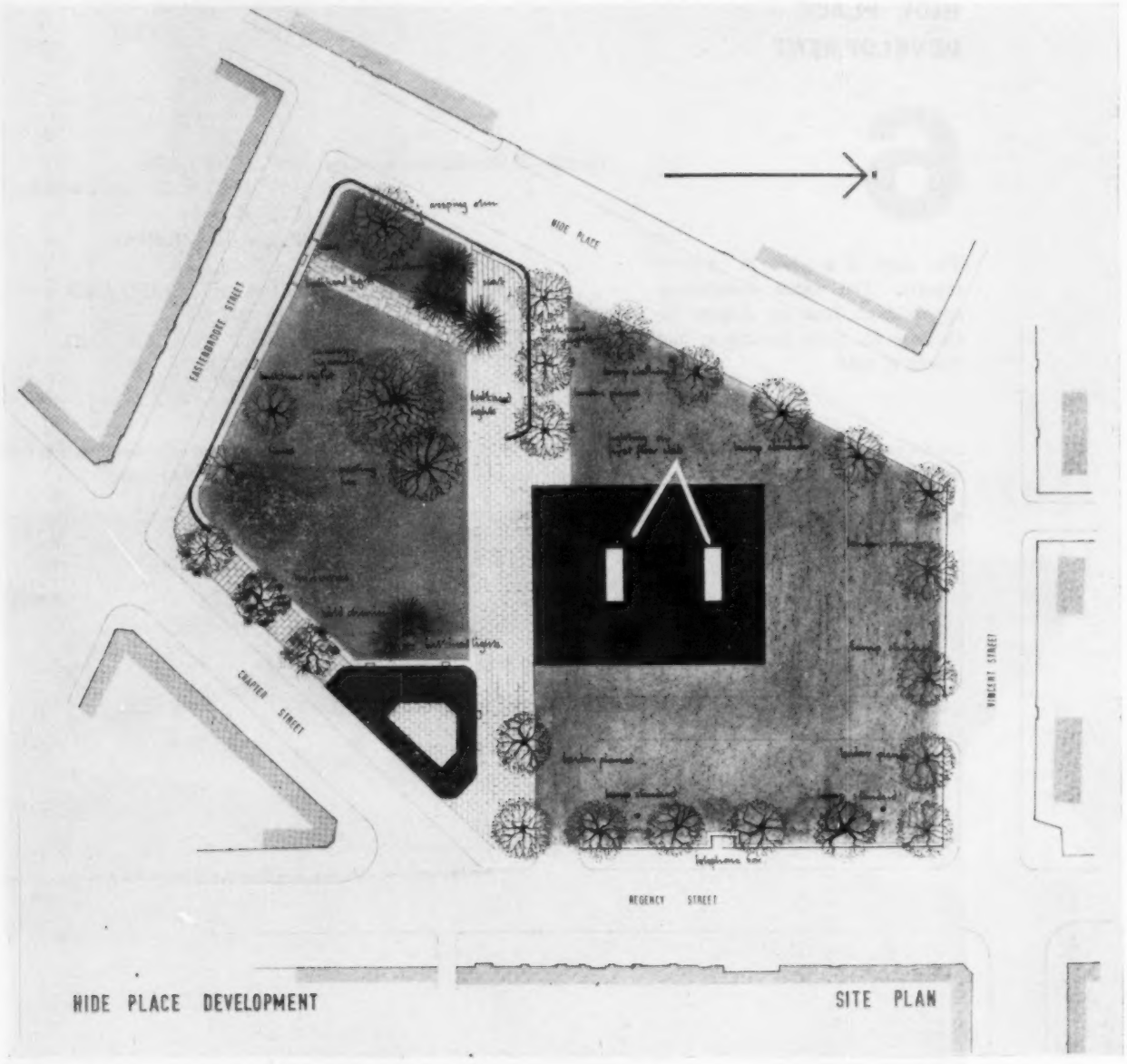
SfB No.	(98)
UDC No.	728.2

director of Westminster housing	E. J. EDWARDS
architects	STILLMAN & EASTWICK-FIELD
associates	R. SMORCZEWSKI D. STOLLAR
structural engineers	CHARLES WEISS AND PARTNERS
quantity surveyors	HARRY TRINICK AND PARTNERS

London's monuments from an unfamiliar altitude. This wall of the terrace will be finished in western red cedar boarding. The RSJ above the concrete edge stiffener slab is part of the maintenance trolley track, and is not visible outside the building



progress report



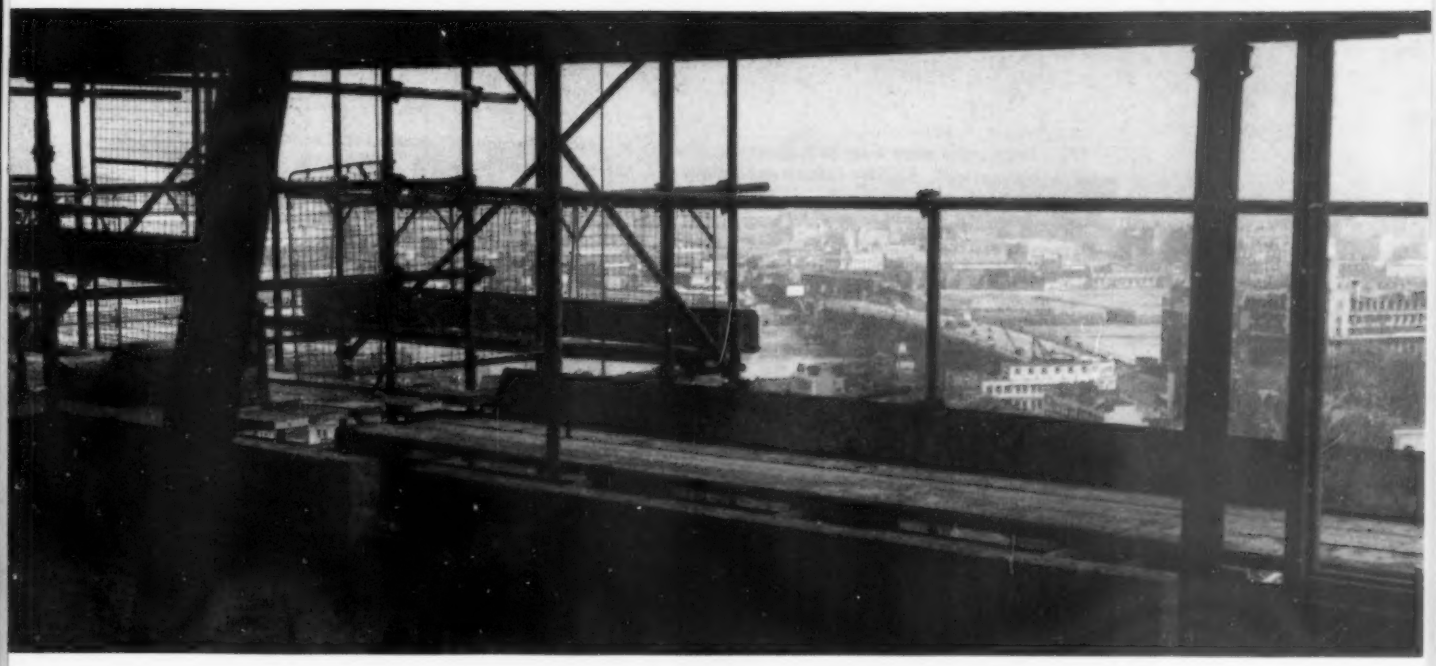
HIDE PLACE DEVELOPMENT SITE PLAN

Some ten weeks have elapsed since the last report, and during this time the remainder of the cladding slabs, except those which are to be placed in the positions now occupied by the hoist and the temporary lift, have been fixed. The crane has been lowered and this has freed the ground so that the exposed aggregate paving which constitutes the parking area may be laid. The outhouse which contains the caretaker's workshop, tenants' stores, bicycle store, pump room, transformer chamber and electric intake room has already been begun.

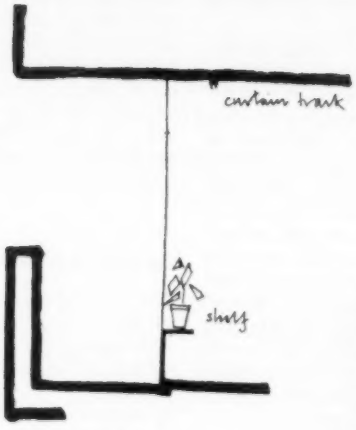
The glazed metal screens and entrance doors on the ground floor are at present being fixed, and have so far, despite their size, fitted satisfactorily up to the natural concrete walls and piers: a requirement which demands accuracy in both the concreting and the manufacture of the screens, not lightly to be undertaken.

The roof of any building as tall as Hide Place is bound to excite curiosity, if only because of the views from it. Having no basement and the other floors being uniform in plan, the small laundry was planned on the roof alongside the extract fans, lift motor rooms and tank rooms. It was also planned to be adjacent to an enclosed space on the south end of the roof which it is hoped will be used as a club room. Although not complete, some impression of the view that will be obtained from it is given in the photograph. The rest of the roof is available as a terrace, and consists of 12 in. × 12 in. × $\frac{5}{16}$ in. asbestos cement tiles on a 1-in. cement/sand screed on preformed expanded polystyrene slabs cut to form falls (5 in. to 1 in.) on 1½-in. structural screed on 5½-in. structural precast concrete slabs (as normal floors).

The preformed wedge-shaped expanded polystyrene, which was used somewhat experimentally (in so far as its preforming was concerned) seems to have been proved successful—its insulating qualities are not doubted. The full storey height parapet gives security, and the slots allow one to indulge in the game of identifying London's well-known buildings. Parts of the inside of the parapet and the walls of the motor and other rooms are to be faced in concrete from the shutter and parts in untreated western red

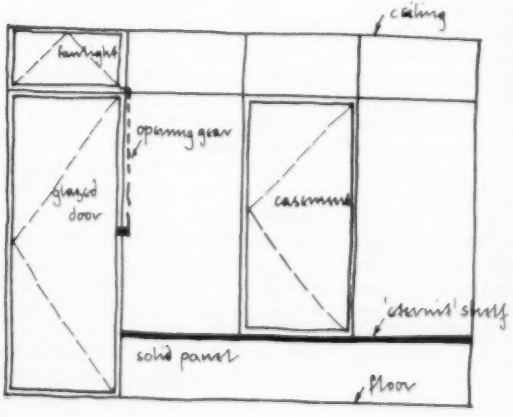


The view to the south from the club room. This window, which is in total some 65 ft. 0 in. wide, is set back from the face of the building to give a sense of security and provide a window cleaning walkway



Section through balcony screen

Diagrammatic internal elevation of glazed screen to balcony from living-room



The container from which the Swedish plaster, used as a trial in one of the flats, is forced into the spray gun. In the background may be seen the windows which have been masked with polythene, left



Spraying in progress at the trial. Local making good may clearly be seen. In Sweden this technique is often used in conjunction with storey-height concrete blocks, thereby reducing making good to a minimum, below



A close-up of the trial application. The textured finish resulting may either be left or smoothed out with a special tool, below left



cedar. The photographs show how far the work has progressed. Activity has not, however, been restricted to the ground and the roof. Progress has been made in the finishing trades in the flats themselves, of which a number are now virtually complete. It is proposed to hand over some of them to the Westminster City Council this month to provide sufficient accommodation to allow the remainder of the old buildings still standing on the site to be vacated and demolished.

The flats are being completed from the first floor upwards—a reversal of the usual procedure—which avoids delay when the building is exceptionally tall. The contractors have had to plan their operations so that all the services are working when the lower flats are occupied. It is fairly common practice abroad to occupy a part of a tall block in this way before the whole building is complete, but unusual in this country. One of the difficulties encountered is the cleaning of the flats prior to painting, and maintaining them in a proper condition whilst work goes on on the upper floors.

Plastering, painting and polishing

The plaster used throughout is a premixed type containing vermiculite, chosen with the object of minimising the risk of condensation, and because it has good adhesion to smooth concrete. This was particularly important on the soffits of the precast floor slabs, which were cast accurate and smooth. The thickness of the plaster is ½ in. on the walls and ⅜ in. on the soffits. It is just possible to incorporate M.I.M.C. cable in the wall plaster but not in the ceiling plaster. Boxes for electrical switches advertised as "plaster depth" are, be it noted, deeper than ½ in. plaster!

Points that have been noted to date about the plastering and painting which others may find of interest are that:—

1. owing to the national shortage of skilled plasterers every means is nowadays taken to reduce the labour and time involved and as one way of doing this the contractors decided to spray the undercoat plaster. No reduction in standard of finish was authorised on this account and the result has, in general, been acceptable. The contractors say that it did, in fact, save labour and time.
2. when plaster is carried over the junctions between dissimilar materials (concrete walling and breeze partitioning) it was found that an attempt to use scrim reinforcement only did not prevent cracking, and the original proposals for V joints in the plaster were resorted to. The joints have been successfully made and do not look unsightly.
3. owing possibly to unequal suction in the plaster, it has been found very difficult to obtain a really satisfactory wall finish with two coats of brushed-on oil-bound water paint, but that the defects can to some extent be overcome (*a*) by spraying the first coat, and (*b*) by choosing light colours.
4. there is too ready an acceptance in the trade of a low standard of paintwork for what is termed "this class of work," irrespective of what is specified. It is difficult to achieve a really "solid" looking job in two coats, but architects should insist on proper stopping and filling of holes and cracks within the meaning of the phrases "all surfaces are to be prepared for painting" and "knot, prime and stop"
5. a very much superior finish has been obtainable on hardboard doors with a factory-applied base coat than on ordinary hardboard.
6. there is good reason to suppose that inexpensive unlipped hardwood-veneered doors of respectable manufacture may be suitable for housing, thus avoiding the difficulties of matching and unequal margins resulting from "shooting" the doors where lipping is provided. If polished the hardwood veneers also make a change from painted flush doors, and on this job a good finish has been obtained over factory "sealed" doors by "bodying in and wax polishing" at a price of approximately 10s. 3d. per door (both sides).

Experimental plastering

Whilst the spraying of the general plastering was in itself to some extent an experiment, it was undertaken by the contractors as an extension of the normal technique. As a separate and limited experiment, however, the walls and ceiling area of one complete flat in the building were treated with a spray-applied finish about one-eighth inch thick, a product in wide use in Sweden which consists of the mineral dolomite with natural and artificial plasticisers, and which arrives on the site in containers ready for use. It was demonstrated by the Swedish manufacturers, working in association with a British firm, and with the permission of the Westminster City Council, the architects and the general contractor. The spraying plant required for the demonstration was loaned by its British manufacturers. Before applying the material certain making good and local filling was carried out. One coat was then applied by spray to walls and ceiling areas using a pressure of 120 lb. per square inch; this was then smoothed out using a special tool. When the second coat was applied on ceiling areas it was left in its attractive lightly-textured finish as applied by the spray gun, which provides a good finish requiring no further painting. On walls the second coat was again smoothed out with the same tools giving a fine smooth finish ready for painting or papering.

The pressure used enables the ceiling to be sprayed from the floor and no time is lost moving trestles or benches. As an indication of the speed of the operation, walls and ceilings of the largest room in the flat measuring 12 ft. × 18 ft. were evenly spray coated by one man in seven minutes, and two men completed the smoothing out operation so that the whole time for the two operations was just under 20 minutes.

The finish dries overnight, can be recoated next day, and is ready for painting within 48 hours. There is no waste, and compared with conventional wet trades, it introduces no mess or sundry dirt into the building.

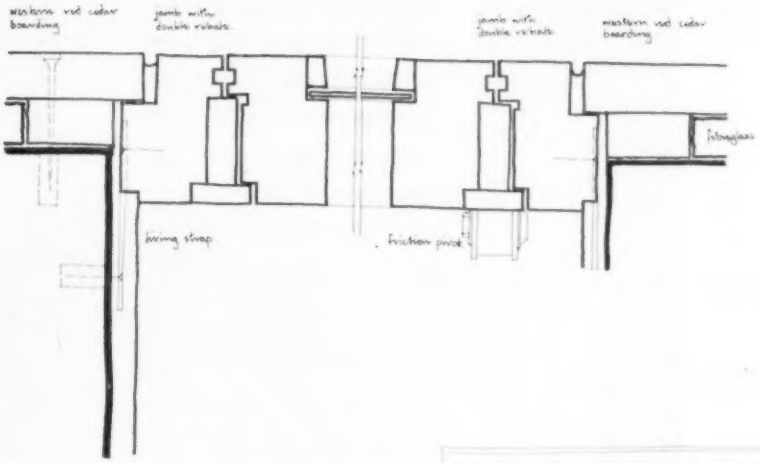
It was evident from the experiment that in suitable conditions *given smooth surfaces* (such as the soffits of the floor slabs) the material and the techniques would have advantages in reduction of labour and speed of application.

The design of windows

The following considerations influenced the design of the windows:—

(*a*) Reduction of maintenance
(*b*) Ease of cleaning (and glass replacement)
(*c*) Safety
(*d*) Elimination of draught (and rain)
(*e*) Controllable ventilation.
(*f*) Access to means of opening (of particular importance with old people)
(*g*) Reduction of heat loss (double glazing in living room windows)
(*h*) Arrangement of curtains (tracks are provided and are set back the thickness of the wall leaving the sill clear and allowing the window a reasonable degree of opening)
(*i*) Ease of fixing from inside during construction
(*j*) Restriction of glass sizes to economise weights of glass
(*k*) Cost

Those windows which formed the screen across the living rooms giving access to the balconies presented relatively little difficulty since they could be reached for cleaning from the balcony. As the glass areas were large, however, double glazing was used, rebates on opening lights were double and the door had a weather-sealed threshold. It is debatable whether it would have been more advantageous to have weather stripping throughout

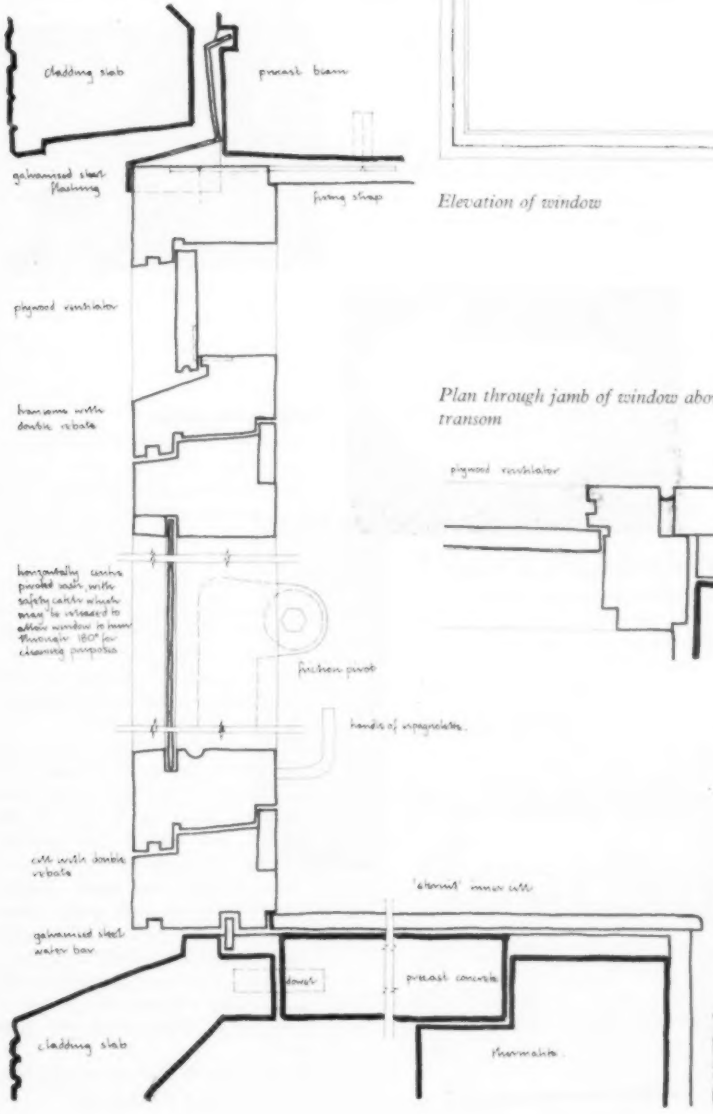


Plan through jamb of window below friction pivot, above left, and plan through jamb of window above friction pivot, above right

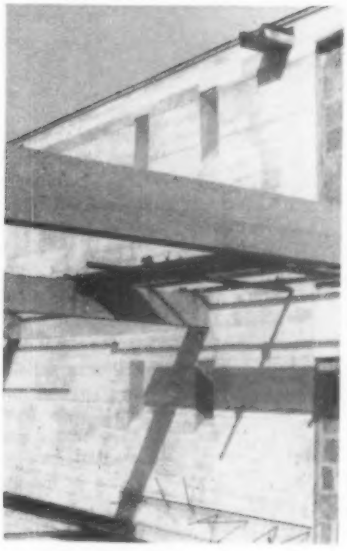


Elevation of window

Vertical section through window



Plan through jamb of window above transom



Part of the roof terrace with access from the club room. Shelter is provided by a storey-height parapet lined with western red cedar boarding

Street scene, 20 storeys up



Detail of the fenestration showing its relationship to the precast panels. The bored holes in the vertical boarding are ventilators to larders. Note the return of the cedar cladding into the balcony recesses. The cedar is carried through behind the balcony fronts. Although deep shadows may be seen, the living rooms themselves are surprisingly light in all conditions, below



progress report

instead of the double glazing. The top-hung opening ventilators (as distinct from the casement and the door) were provided with gearing so that they could be operated easily. As far as the other windows are concerned, the means by which it is hoped to answer the problems are shown on the accompanying drawing.

The appearance of windows is bedevilled by the demand for an opening hopper giving limited ventilation at high level. It was felt necessary to accede to this demand, particularly in kitchens, but an attempt was made to avoid any division in the glazing. The ventilator is therefore made of plywood, and will be opened and shut by a specially-designed bracket operated by a pole. The appearance of the window with the ventilator just visible in the centre of the panel in the photograph.

Work to be completed

It remains for the garden wall, the paving, the parking area and garden lighting, and the planting to be done. The accompanying drawing and photograph illustrate these. The lighting to the parking area, which supplements the strong lighting on the underside of the first floor, was chosen because it was felt that it would not conflict with the street lighting, it being non-directional and to that extent neutral. The garden lighting was similarly intended to be as unobtrusive as possible, and since low level lighting was considered too liable to damage by children, bulkheads mounted on the garden wall at about 6 ft. high suitably protected by concrete hoods were proposed and accepted. Their purpose is not to illuminate the whole area but to eliminate wholly unlit corners. It is hoped that it will be possible for the whole area to remain uncluttered by the usual fences and other obstructions so often associated with housing.



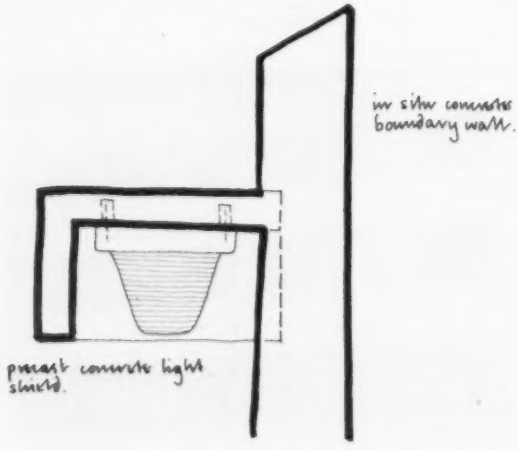
The block rising behind existing buildings. As yet hardly any unsightly staining of the panels is apparent



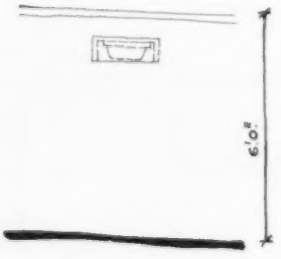
Textured concrete walling to the lift motor room as seen from the roof terrace. The apertures ventilate the lift shaft. The eaves will be finished with asbestos cement eaves pieces. The asphalt is to be removed from the gargoyles



Post-top lamp chosen to avoid competing with existing street lighting



Elevation, below, and detailed section of bulkhead lights in garden wall, left



Architects' Comments

1. Although the precast facing slabs are darkening there has been an encouraging absence of streaking, which supports the decision to avoid drips and to rely on well-sloped tops to the slabs acting as their own sills.
2. The raising of the first floor has permitted a larger and more imposing entrance than is customary in many designs for flats, one which is also enclosed, and it is hoped this may contribute to a feeling of respect for the building by the tenants.
3. The problems which are posed because of the evident destructive inclinations of children suggest that architects must be realistic in this matter, but equally and perhaps more important, that in a sociological sense a good deal more thought should be given, and action taken, to provide the children with better opportunities for creative activity.
4. Passer-by to architect observing building: "That will soon fall down."
 Architect: "What makes you think so?"
 Passer-by: "Well—you should have seen the way it was put up!"

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the architects' journal
supplement on

architectural education

editorial

This supplement has come into being through the co-operation of the AJ and by the efforts of a number of teachers of architecture concerned to clarify the purpose of architectural education and to further its development.

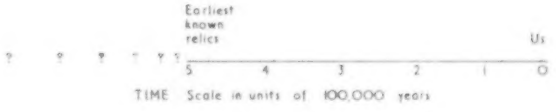
The personal views of these teachers on architectural education are printed to give an indication of some of the attitudes which exist.

To introduce these personal statements against their background, an assessment of the situation has been made. If this should engender, or provoke, useful comment on our problems, it will have served part of its purpose.

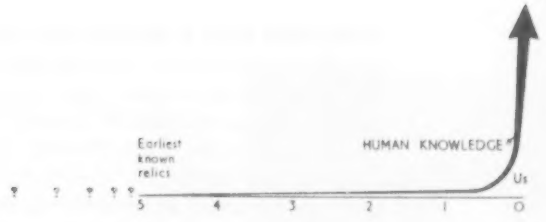
an ASSESSMENT of the situation

what led up to it?

Our earliest knowledge of ourselves and our world has come from fragments of human bone recently discovered in Africa. We believe these to be about 500,000 years old. Imagine a time scale stretching from that moment in time to our own day. . . .



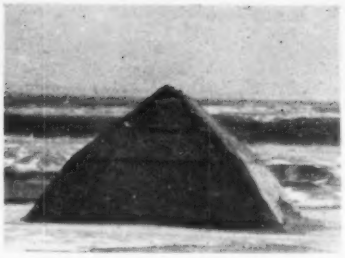
Our rational knowledge of ourselves and our world in this period could be expressed graphically by adding a vertical component to this time scale. . . .

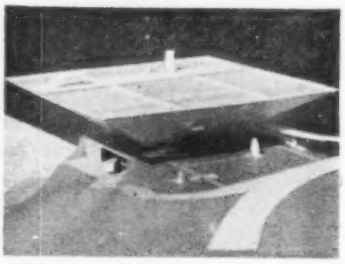


We are now subject to accretions of knowledge at such a rate that none of us can ever hope to encompass more than an infinitesimal part of the whole.

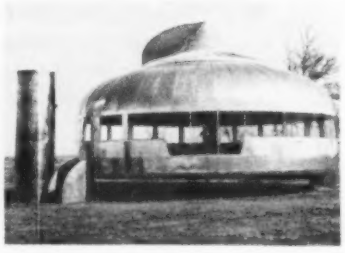
It we wish to have some comprehension of this, we can only seek it through our perception of the texture of present-day life.

what's going on?









in the world of building . . .

Our particular task as architects might be defined as " devising the best human environment in any given situation."

The proportion of work for which our profession is responsible is not very large. If all buildings were to disappear overnight irrespective of their formal architectural values, most of us would perish. The former statement is " fact," while the latter observation is " fiction." Both are sobering thoughts.

The organisational process of building nowadays is a compound of the architect, the structural engineer, the quantity surveyor, and the many specialist advisers.

The operational process of building nowadays is a compound of the contractor, his labour and craft force, the supplier of materials, and the industrial manufacturer.

Lurking behind all these identities are human beings like ourselves, many of them puzzled and bewildered, and some antagonised by the attitudes adopted by others outside their own specialities.

The result is suspicion and confusion, with many voices crying " come hither " and others " go thither." The general public (which includes ourselves) are yet more bewildered and confused, and certainly do not yet have any real conception of the role of the architect.

What role, or roles, should we fulfil?

We must know this before we can adapt our educational facilities to the most effective ends.

in the small world of architectural education . . .

Systematic " schooling " in architecture was first introduced towards the end of the last century. This was, in the main, an extension of the pupilage system to enable the masters to cope with the increasing complexity of the situation and to satisfy the needs of the increasing market for architects. This period, identified with the beaux-arts system of set problems and formal architectural compulsions, held sway in this country for at least half a century. The fabric of our thinking is still impregnated with residual evidence of this approach.

The work of the Bauhaus exemplified the first significant steps to re-integrate architectural education with the facts of the moment, and has exerted the most formative influence on our current yet primitive educational tools.



We now provide architectural education in universities,
technical colleges,
schools of art,
and two " private schools."

The facilities available in these centres vary considerably, and wide differences are evident in the intention and substance of the teaching they provide.

Many students study at the centre nearest to their homes and their parents' pockets. Students in any one school will represent as wide a variety of human attributes and defects as are found in any other " slice " of life.

At the same time, many schools are known to the profession by their attitudes towards the teaching of architecture . . .

the " real project " school,
the " technical bias " school,
the " good assistants " school,
the " arty " school,
the " conceptual " school,
the " human sciences " school,
the " holds barred " school,
and so on

Yet it is doubtful if many of the students entering schools of architecture are really aware of, and therefore able to evaluate, the purpose of the course of professional preparation to which they are about to be subjected, or to decide that *this* is the one which is really suitable *for them*. It is a simple fact of education that people will only learn what *they* feel they *need* to know. Offer them something else, or try to force this down their gullets, and their natural defence mechanisms will erect a barrier which will reduce the attempted assault to mere impotence.

If the schools are to remain as different one from the other as they now are, it might be profitable for them to make their aims quite clear to prospective students, and then to select those apparently best suited to their own particular courses.

It may also be that there are too many voices in this matter.



Because of the short history and past preconceptions of schooling in architectural education, many of the facts of " learning " and the " techniques " of " teaching " known to educationists in other fields have still to be discovered and utilised by teachers of architecture. We may have been too much concerned to assure the continuance of our own professional predilections, and the learning by rote which this has entailed, for us to be able to see the wider picture.

Is not the perception of the wider picture right at the very heart of this thing we call "architecture"?

G. P. W. TAYLOR

OPINION

some personal views on architectural education

by

Liam Carlin
Hammersmith

To design is neither to await inspiration nor to apply ready made formulae. It is a discipline, precise and teachable, concerned with *all* the factors in a building problem. Factors of human movement, physical and psychological climate and aesthetics, structure, materials and processes, services and economics. To design is to see these factors without preconceptions, to assess them factually and to assemble them logically. If a designer can also make this the occasion of a personal and poetic statement, so much the better.

Intelligent design waits upon sound information. In a world of specialisations within specialisations, no architect can pretend to master the required universality. The best informed designer will be the one trained in the techniques of collaboration.

The building industry is changing and will change. As long as this is so, we cannot afford to close the question of how best to foster in students the broadest design discipline and the ability to collaborate effectively in an essential human activity in which the "architect" designer is one participant. This supplement could help to keep the question open.

Peter Cowan and Newton Watson
Bartlett

Buildings begin with people.

Architecture should not be a formal or production-derived solution imposed upon the users, but a growing together of human needs and the industrial equation.

Somewhere a synthesis occurs; at this point stands someone—call him architect or what you will—reconciling not leading—creating not directing—not an amateur of other disciplines, but a professional in this task.

As our knowledge of human physiological and psychological requirements deepens, creative design becomes easier. The multi-disciplinary team is the organisation, research is the tool, and science the discipline which will push our vocation forward in the second half of this century. Buildings end with people.

E.J. W. Curtis
Northern Polytechnic

Architectural education is a process for making architecture via its "end product," i.e. the qualified practitioner. The courses operating in this country at present are capable only of processing for today's transitional fluidity; for tomorrow, five years hence, a prophetic and pioneering system must be instituted, based on an extremely tough and flexible experience of design, scientific construction and industrial production; in fact flexible enough to withstand the impact of constant revolutionary changes and ideas, which is not only to be expected with the increasing tempo of scientific and technological thought, but is also desirable.

A rigid two dimensional master syllabus, varying little from year to year, is out. The emphasis should be on a three dimensional approach integrated closely with industry, science and man's bio-technic needs in society. Architects must cease to be assemblers of unco-ordinated standard components, nothing less than control of the industrial expression of his art will suffice; to do this a dynamic fusion of architecture and industrial techniques should take place during all years of training; the architect must become unafraid and stop hankering after a New Old Look.

The techniques of teaching or organisation are matters for individuals and establishments, assisted by liaison between teachers; the catalytic fundamentals must come first without timidity or prevarication and with the urgent realisation that if vital decisions are not taken quickly the second schism between architecture and parallel evolution may be a reality. Teachers of architecture must take full and active responsibility for the destiny of architecture and its place in the future.

Maurice Goldring
Ulm

Building is an integral process. It is becoming more and more complex. The groups which exist in society for carrying out the task of building are essentially tools. They are not an end in themselves. Architects, engineers, quantity surveyors, contractors, tradesmen and manufacturers are beginning to realise that their compartmentalised attitudes are prejudicial to the realisation of buildings which fulfil the physical, psychological, social, political, economic and technical needs of our society. Industrialised building can provide an answer to the problem, but only if we accept the total implications in terms of education and training.

The two possible choices open to an architect in this context are as a highly specialised technologist or as a planner. He can either concentrate on the design, manufacture, and assembly of materials, elements, components and systems for various building types, or on the design of specific buildings made up of these parts. He cannot do both. But he must be trained to work in either field, aware that they are of equal importance, and allow his final choice to be determined not only by his own capabilities, but by the broader requirements of the society in which he lives. Education must provide the means to achieve this.

Anthony Goss
Birmingham

The dawn of the second Industrial Revolution finds architects largely unprepared to meet its challenges. The heart of the matter is industrialised building. Either we grapple with this or surrender the leadership of the building team.

architectural education is far more than initial training in architectural schools. It must equip *today's* as well as tomorrow's architects to find (and keep!) their place in a world of increasing complexity.

The Schools must concentrate on training in *principles*, imparting a far more fundamental understanding of all aspects now needed for the "design process." This must include liberal studies as well as sciences. A far higher intellectual level is required. Further specialisation is inevitable. Students must be trained in the methodology of development work and research to enable them to follow up their basic training.

The whole profession must participate in architectural education in some form through post-graduate studies, refresher courses and research

The supplement should reflect all these aspects If it becomes a medium for the exchange of new ideas and experience in architectural education it will be helping to give that more dynamic impulse so badly needed

Brian Hitchcox
Bournemouth

The education of an architect should reflect and develop the possibilities that exist within his profession in practice in a modern society and the principle behind his education should be that architecture should serve rather than dominate that society.
Hence the task of a school of architecture is not only to be able always to observe and appreciate the progressive pattern of life, but be sufficiently flexible to integrate its teaching philosophy with it.
In order to develop his capacity for analytical thought and oral description, the student should be given instruction in the fundamental sciences and directional guidance in self-tuition so that eventually he may achieve a system of methodical thinking suitable to his own personality practising within the profession.
If we are to teach architecture successfully then surely the aim must be to produce an ARCHITECT as opposed to an exam. result.

William Kretchmer
Welsh School

The architectural profession to-day has no generally agreed view of the function and responsibility of the architect in society. Controversy over architectural education is a reflection of the fact that architecture means different things to different people. If teachers wish to examine their own responsibilities—which are the content and methods of teaching—they first need to define their view of the architect's role. At the BASA Conference in Oxford, Sir Leslie Martin gave a lead and defined the architect's task as the reordering of our environment. Accepting this view, we recognise that the task requires a balance of a wide variety of talents and contributions and that our educational structure must be built up accordingly. It is an all-embracing task which we can achieve as soon as we recognise that a valid environment means the fulfilment of human needs within the technological means available rather than the expression of aesthetic predilections, and that design cannot be separated from manufacture and assembly. Our schools building programme was based on this philosophy and it is no accident that it constitutes our outstanding contribution to world architecture, recognised by the recent Triennale award. We must carry on from there.

Paul Ritter
Nottingham

From architectural education should emerge many different kinds of architect; e.g. the "Universal Man," the specialist, the co-ordinator, the member of the design team, etc., according to individual bent. Their common needs, as architects, are *four abilities*:—
1 To analyse needs and resources
2 To create imaginatively according to these (synthesis)
3 To direct effectively (communication)
4 To assess the creation logically (judgement)
To teach this, five basic educational principles should be borne in mind:—
1 Emotion and intellect are intimately related
2 Relevance creates interest and enthusiasm
3 Such enthusiasm is catching
4 Once caught, quality and quantity of learning increase decisively
5 Maximum relevance and enthusiasm arise from maximum freedom and capacity in the individual student to use his natural rhythm of work and resources of his school.
For emotional reasons some will reject, irrationally, the above principles.
But if aim and principles stated are valid then the function of this supplement is to report the actual use of specific teaching methods based on the principles and such educational organisation which replaces deadening authority with responsible freedom, enthusiasm and boundless opportunity.

John Simms
Northern Polytechnic

Sociologically, the position of the architect is under review, the functions he fulfils and will fulfil in the evolution of complex technological building are matters of concern.
This concern relates not only to his ability to absorb technical knowledge and develop artistic skills, but also to his intellectual and temperamental suitability for his vocation.
These characteristics need to be inherent and in addition to an initial intelligence and educational proficiency.
Thus teachers should recognise that, whilst the needs of each student will be different, there must be a considered framework of enlightened ideas, progressive methods, and up-to-date techniques of teaching within which both he and they have room to manoeuvre.
Thorough investigation of fundamental principles and basic requirements in all relevant subjects should be the foundation of study. Practical application and first hand experience of aesthetics, material, and structure should closely follow theoretical study.
To understand and develop a method of approach to any problem is more important than trying to solve as many different problems as possible in a given period of time.

D. G. Thornley
Manchester University

In architecture, as in some other subjects, the ceaseless flood of relevant information and the ever widening perimeter of knowledge and techniques within which study and practice must be carried out, together represent the most disturbing influence at present bearing upon related educational systems.
In this context attempts to improve architectural education merely by making minor adjustments to existing patterns are not only unpromising but are likely to leave the next generation of architects quite unable to adjust themselves to the environment in which they must operate.
The component elements of architectural Education such as the study of formal values, the development of an adequate and reasonably stable theory of design or even the presentation of technical information, are all quite secondary to the problem of improving the student's intellectual capacity and it is this aspect of education which demands immediate attention. The real problem is not that of conveying a body of knowledge to the student in a set period of years but to equip him in such a manner that he may, by his own efforts, exploit his personal potential to the maximum degree both during his training and during the whole of his professional life. Whatever process is used must be related to the progress of the more able students, it must be exceedingly thorough and it must be applied most rigorously at the beginning of the course of training.
Only by developing architectural education in this manner will it be possible to ensure that the profession will be able to maintain and, what is more important, improve, its position in relation to society in general.

Future Supplements will contain

Comment,
News,
Reports of events in the educational field,
Correspondence,
Articles of general and particular interest.

Intending Contributors

should write to:—
The Editors,
Educational Supplement,
The Architects' Journal,
9 Queen Anne's Gate,
Westminster, S.W.1,
who will advise on the suitability of subjects for publication. No specific guidance on the length of contributions can be given, as mere size is considered to be irrelevant as against content and worth; contributors should however bear in mind the monthly and necessarily abbreviated nature of these supplements.

The Editorial Organisation

has been devised with

an executive editor	G. P. W. Taylor
an assistant editor	Newton Watson
an administrative secretary	Maurice Goldring
	who may co-opt
a guest editor	to be responsible for a special feature supplement.

To foster free expressions of opinion in these supplements, the editors will meet on previously published dates to hear the views of an advisory panel.
This panel will be open to any interested people who believe that they have something useful to say. In order that these meetings should not become unwieldy and therefore ineffectual, the panel will be limited to seven members at any one meeting. Intending participants should give not less than ten days' notice of their intention to attend a meeting; when the total of seven panel members for a meeting has been reached, any further applications will be put at the head of the list for the next meeting.

The Panel

which advised on the constitution of this first supplement had the following members:—

Liam	CARLIN	Hammersmith
Peter	COWAN	Bartlett
E. J. W.	CURTIS	Northern Polytechnic
Maurice	GOLDRING	Ulm
Anthony	GOSS	Birmingham
Brian	HITCHCOX	Bournemouth
William	KRETCHMER	Welsh School
John	MUSGROVE	Bartlett
Paul	RITTER	Nottingham
John	SIMMS	Northern Polytechnic
D. G.	THORNLEY	Manchester University
Newton	WATSON	Bartlett

besides many others who wrote to express their support for this venture.

The Next Panel

will meet at 2.5 p.m.
on Saturday, June 24th,
in The North Committee Room, RIBA.

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Contract administration

subcontract tenders 27

When the contract can be seen on the drawing board in construction stages or trades, decisions should be taken on which items are to be dealt with as:—

a. work for which materials are to be supplied and delivered and which will be carried out on the site entirely by the sub-contractor.

b. work for which materials or items of equipment are to be supplied and delivered only and fixed on the site by the general contractor.

Unless requiring a specific service or specific materials, each should be the subject of competitive tender. Having first investigated the potentialities and suitability of a product or firm with the technical representatives, a full list of the firms you propose to approach should be compiled and sent to the client for final approval. Any additions to or omissions from this list requested by the client should be made at this stage before the firms are approached.

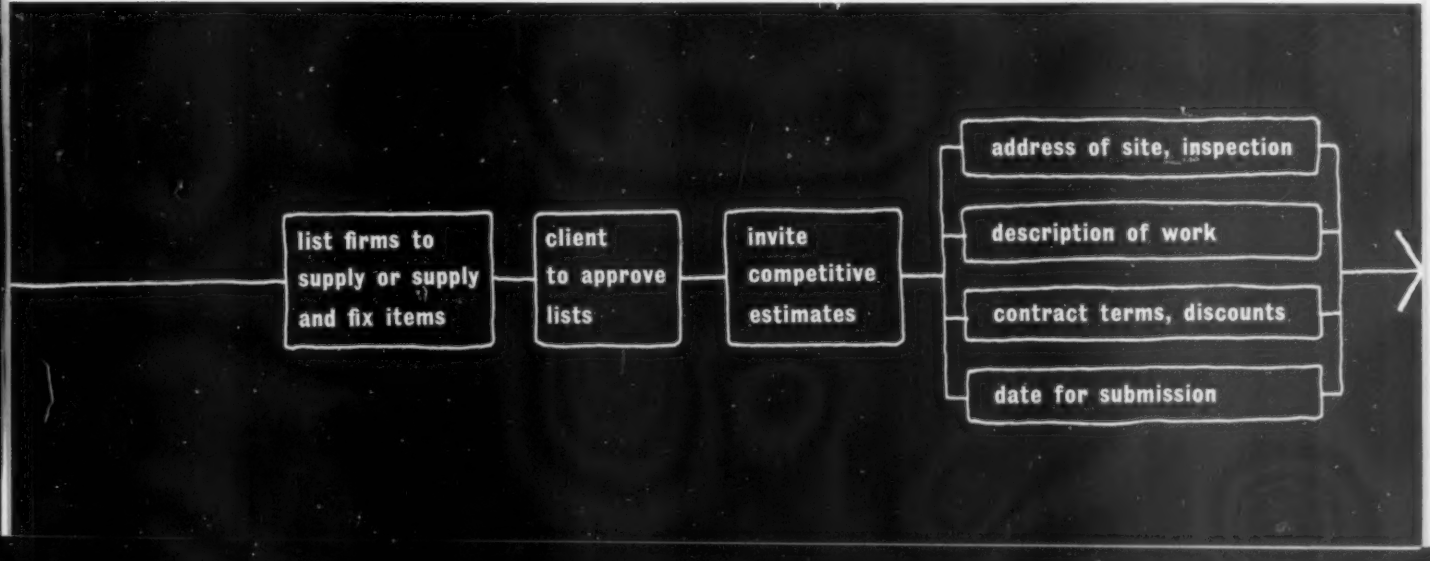
When approval of the list has been received from your client, it is important that each firm is invited to submit a tender under similar conditions. It is essential, therefore, that:—

1. they know the name of the client on whose behalf you are inviting tenders, and the address of the site.
2. they are provided with all necessary information on drawings.
3. the works to be done are clearly defined and accurately described.
4. they are to take into account the appropriate contract discounts in their estimate.
5. they are made aware of access to the site and the probable date on which works will be required to start on the site which will be subject to confirmation when the main contractor is nominated.
6. where possible, they are given the opportunity to and should visit the site.
7. they know that it is a sub-contract to a main contract and agree to the contract terms under which the main works are to be carried out and that, if successful, the official order will ultimately be placed by the general contractor.
8. they have a time and date by which the tenders are to be returned to the architect.

In reply they should be asked to give:—

1. at least three copies of their quotation.
2. their delivery date from the time of order.
3. anticipated time required for the works on the site } where
4. a description of builder's works required and attendance } fixing on site

Copies of all documents as sent out to each firm should be kept in the office. As the procedure for inviting tenders follows a standard pattern, it is worth using standard documents for the purpose.



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Contract administration

subcontractor nomination 28

Acknowledge receipt of all tenders immediately. If, during the period of tendering, there is a request for extension of time it must, if granted, be given to all the firms tendering for that part of the work.

When all tenders are received they should each be checked either by yourself or by the quantity surveyor against the original set of drawings in respect of areas or numbers of items, to ensure that each complies with the general terms of the invitation to tender. They should then be checked arithmetically and finally analysed one against the other under headings which include:—

1. total figure
2. price per unit of measurement (lineal, area or itemised)
3. percentage discount and compliance with terms of contract
4. delivery
5. length of time required on the site
6. attendance required and builder's work involved
7. conditions of tender if not in accordance with contract terms given and whether the firm is prepared to amend these to comply
8. closing date for acceptance of tenders.

Copies of the sub-contract tenders or these analyses should be sent to the client with recommendations and a request for instructions to nominate the successful firms. Copies of the successful tender should be set aside for office records and for the quantity surveyor and the original given to the general contractor when eventually appointed.

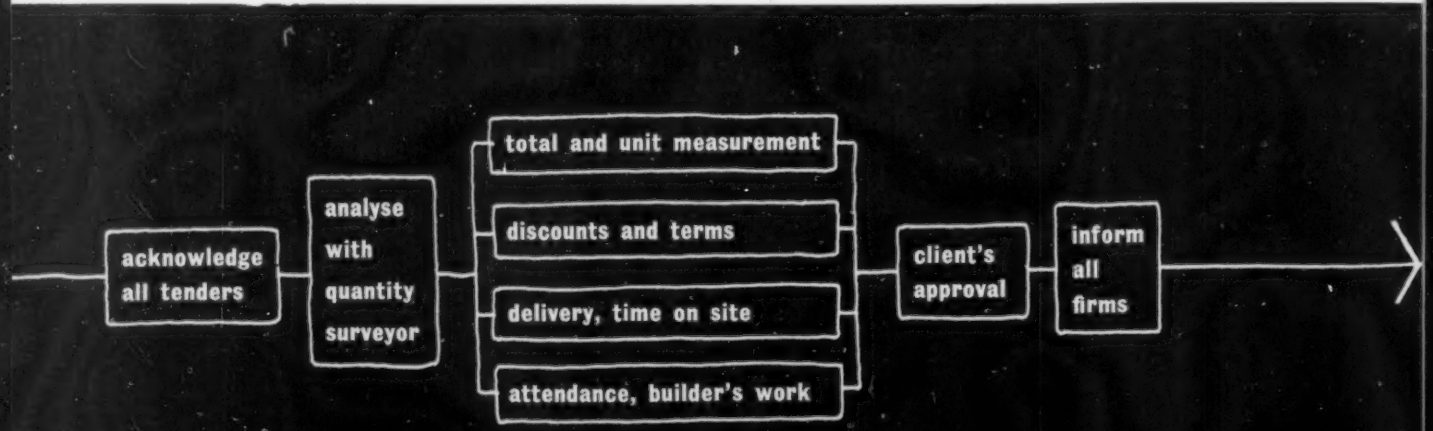
Successful firms should be informed that they will receive the official order for the work through the general contractor when he is nominated. The unsuccessful firms should be informed as soon as the decisions are made.

It is important that you, as architect, do not officially place the order for the work. The terms of contract between the general contractor and the client can only be administered correctly if the general contractor has placed the order, entered into sub-contract and instructed the sub-contractor direct.

Where drawings or details are to be prepared by a sub-contractor, this early nomination pending sub-contract arrangements by the general contractor provides the opportunity for discussion and for the drawings to be prepared and checked as part of the general drawings' programme before the main contract is placed. Items related to the work, including such things as the amount of agreed tolerance, can then also be settled.

Samples of all materials being used should be kept in the office for comparison with the work on the site throughout the course of the contract.

It is worth remembering at this stage that your nominated sub-contractor is protected under the RIBA contract in case of default in payment by a general contractor, in which case the architect may certify direct. The nominated supplier is not protected in the same way and is regarded as a merchant to the contractor.



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Contract administration

cost analysis information 29

During the course of the contract, prices invited will become available for all the sub-contract work on the building. Information concerning the lowest on each sub-contract should be abstracted and itemised for future reference in the office for estimating purposes on other contracts.

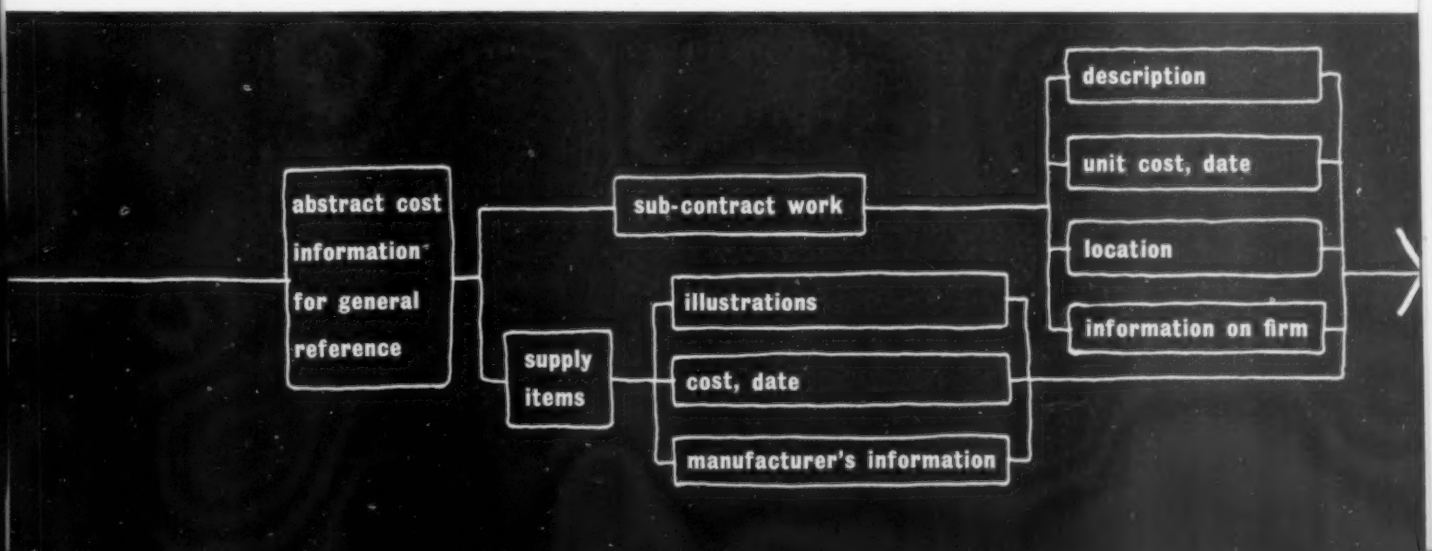
Information abstracted should include:

1. the price per unit measurement or cost per item
2. area, number of items, or quantity
3. location of contract
4. name, address and telephone number of company (and representative)
5. the date on which the estimate was obtained.

These should be kept up to date by replacing existing information with new estimates as they come into the office on any contract. It should work as a fully comprehensive rule of thumb guide on all the aspects of construction and should include materials, components, mechanical services, specialist equipment or installations of any kind, furnishing or internal finishes.

This system should work in conjunction with a similar analysis of items which have been selected during the collection of data and the analysis of items for the schedules.

In an office where the collection of these data is being made on a number of contracts simultaneously by a number of assistants, it is sensible to abstract the illustrations from trade catalogues of those items which are regularly selected and form a reference system of them. Each illustration should be completed with its manufacturer, address, representative, telephone number, current price (dated), and reference number. As items are neglected, superseded or otherwise become out of date, the illustrations and information should be replaced. This particularly applies to sanitary fittings, electrical items, ironmongery and other supply items.



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Contract administration

alternative contracts 30

While building up your contract drawings, inform your client of the alternative contracts which can be used and recommend the type you consider to be most suitable. When a quantity surveyor is involved discuss the alternatives with him beforehand. Depending upon the scope of the work any one of the following R.I.B.A., forms of contract may be used:—

1. A contract for use without quantities
2. A contract for use with quantities
3. A contract for use without quantities adapted for local authorities
4. A contract for use with quantities adapted for local authorities
5. A contract allowing for prime cost plus fixed fee
6. A contract allowing for prime cost plus percentage profit and overheads.

Numbers 1-4 fall into the category of tendered price or lump sum contracts. These are used where a builder, having tendered, undertakes to carry out the whole of the work for an agreed sum. This sum becomes absolute and as a result is normally the most satisfactory form of contract for both client and contractor. When bills of quantities have been prepared, they and not a specification form part of the contract but when not used the specification becomes a contract document. When quantities are not used, however, extreme care should be taken to ensure that all information is shown on drawings or otherwise described in the specification as any oversight would normally incur a claim by the contractor for extra costs.

Numbers 5 and 6 come into the category of cost reimbursement contracts. They are normally used for jobs of extreme complexity or where the client requires an immediate start on site. These are normally undesirable for the following reasons:—

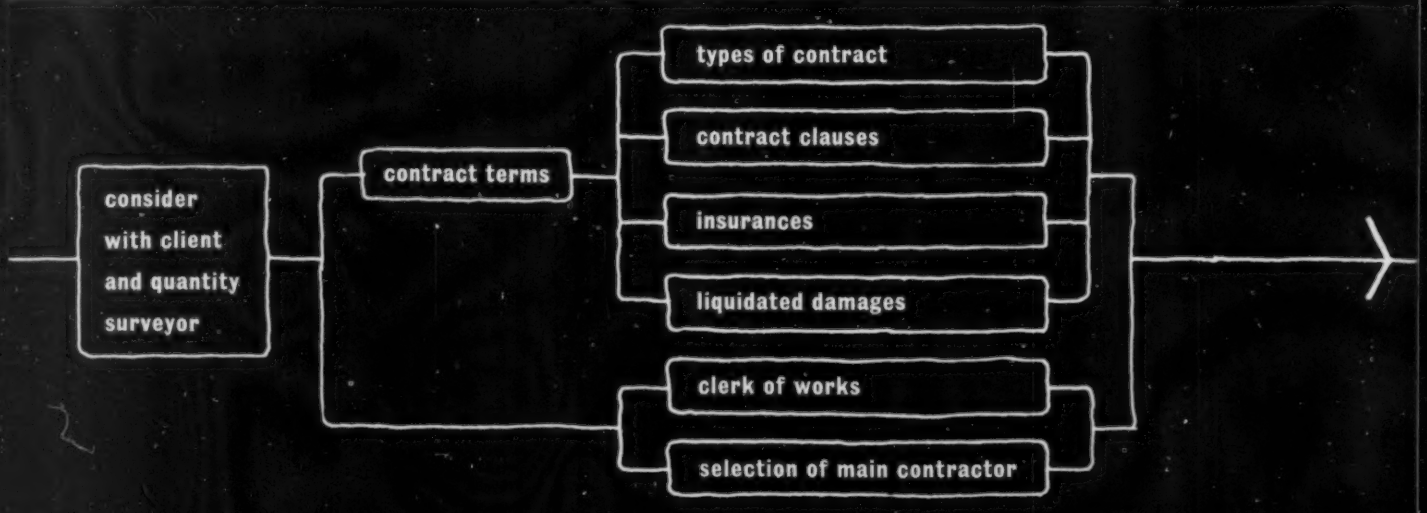
i. The time gained at the outset is often lost by the correction of mistakes or contingencies arising during the course of the contract.
ii. Although the client may have some form of target figure before him, it does not represent a lump sum or true estimate of the final cost.

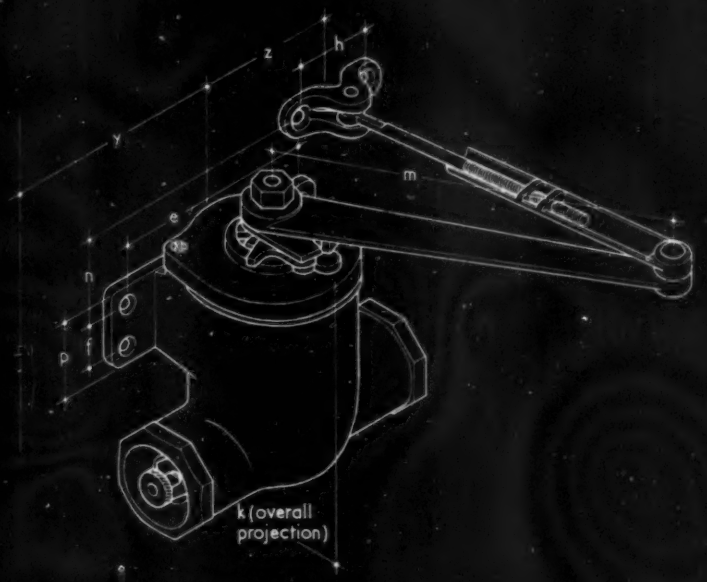
Of the two the fixed fee version is the better as the prime cost plus profit type does not carry the same incentive to finish the job.

Variations of the basic forms are:—

(*a*) A contract of the lump sum variety based on approximate quantities, where an early start is necessary on site, the whole job being remeasured on completion.
(*b*) A lump sum contract plus bonus, where earlier completion than the contract date is of major importance to the client.
(*c*) A lump sum contract with a known contractor based on a negotiated price arrived at from a bill of quantities.
(*d*) A schedule contract where the Contractor provides a schedule of unit rates at the outset of the contract to enable an immediate start to be made on the site and where it is not of prime importance that a client must know the likely overall cost from the beginning. This does not need bills of quantities at the outset. The quantity surveyor measures the work as the job proceeds and prices in accordance with the original schedule.

Care should be taken when a bonus contract is adopted as failure to produce drawings on time gives the contractor a claim for delay and extension of time which may be passed on to you for having prevented the contractor from earning his bonus by finishing earlier.



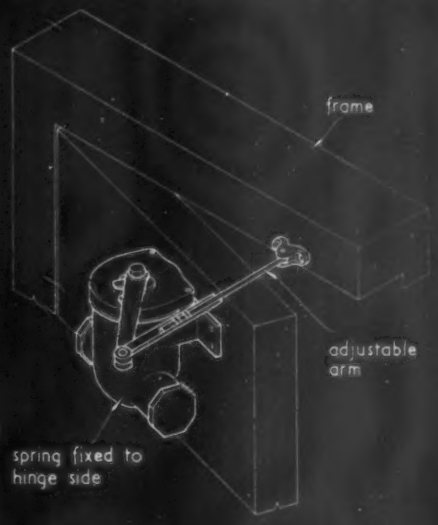


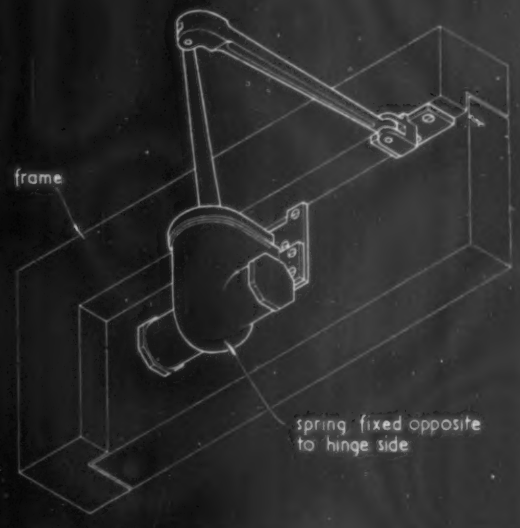
isometric sketch of typical model

model	e	f	h	k	m	n	p	y	z
OO	3 5/16"	5/8"	1 3/8"	2 5/8"	6"	1 1/2"	1 3/16"	4"	2"
A	3 7/8"	11/16"	1 11/16"	3 1/4"	7"	1 7/8"	1 3/8"	5 3/4"	2 3/4"
B	4 3/16"	7/8"	1 11/16"	3 1/2"	7 3/4"	2"	1 5/8"	6 1/2"	3"
C	4 1/2"	1"	1 3/4"	3 3/4"	8 1/4"	2 3/16"	1 3/4"	7 1/3"	3 1/4"
D	5 3/16"	1 3/16"	1 3/4"	4"	9 1/4"	2 3/16"	1 7/8"	8"	3 1/2"

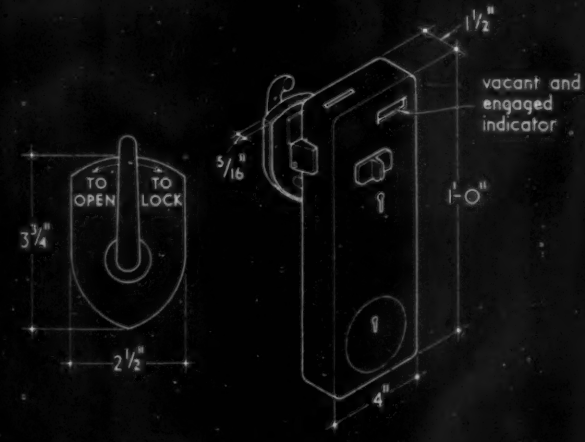
table of sizes for different models

BRITON DOOR SPRING AND CHECK.

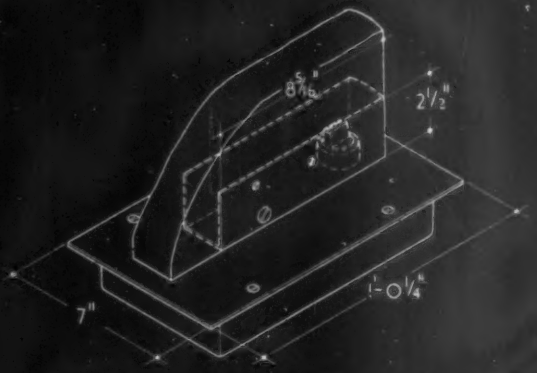




alternative fixing assemblies



PYX COIN OPERATED LOCK.



MONARCH DOUBLE ACTION FLOOR SPRING

DOOR CLOSERS AND FITTINGS. Manufacturer: William Newman and Sons Ltd.

44.E1 DOOR CLOSERS AND FITTINGS

This Sheet describes a group of door closers and fittings, including the Briton, Monarch and Pyx, which are illustrated on the face of the Sheet.

·Briton· Door Spring and Check

This door spring and check is suitable, without alteration, for either right- or left-hand doors. It is normally fixed on the hinge side of the door; if fixed to the other side a special bracket for fixing to the door frame is supplied. The spring can be regulated by hand independently of the hydraulic check.

Construction: The outer case and working parts are of cast and malleable iron. The coil spring is of tempered steel specially manufactured for this purpose only. All parts are interchangeable. A choice of arms is available to cover most applications.

Finish: Sprayed gold bronze, brown bronze or aluminium, statuary bronze, nickel plated, chromium plated, cadmium plated (for outside use).

Service life: The door spring and check is guaranteed for five years.

Applications

Model OO—For very light screen doors up to 6 ft. 6 in. by 2 ft. 3 in., maximum weight 50 lb.

Model A—For light interior doors up to 7 ft. 0 in. by 2 ft. 4 in., maximum weight 80 lb.

Model B—For medium interior doors up to 7 ft. 0 in. by 2 ft. 9 in., maximum weight 112 lb.

Model C—For heavy interior doors up to 7 ft. 6 in. by 3 ft. 0 in., maximum weight 150 lb.

Model D—For medium exterior doors up to 7 ft. 6 in. by 4 ft. 0 in., maximum weight 180 lb.

·Monarch· Double Action Floor Spring

The floor spring is available with ordinary shoes or long adjustable shoes, either type suiting any thickness of door.

In this type of floor spring the box is guaranteed water and oil tight. The patent stuffing box around the spindle prevents water entering at this point or oil creeping. The coil springs are designed to control doors up to 150 lb. in weight. The floor spring will open 125° each way—a total arc of 250°. It can also be made to stand open at right angles.

Finish: All exposed parts in polished brass, bronze metal antique or chromium plate.

·Vanguard· Check Hinge and Spring

These will fit any type of door (within the sizes specified below) that opens one way. They are supplied in pairs of one check hinge and one spring hinge for ordinary doors approximately 7 ft. 6 in. by 3 ft. 2 in. weighing up to 75 lb. or in sets of one check hinge and two spring hinges for heavy doors approximately 8 ft. 0 in. by 3 ft. 3 in. by 2¼ in. weighing up to 140 lb.

Finish: The standard finish is bronze metal antique.

·Paragon· Double and Single Action Spring Hinges

These hinges are made of heavy gauge planished steel or brass in sizes to suit doors from ⅜ in. to 2¼ in. thick.

Finish: Steel—Japanned dead black, bronzed or chromium plated, antique copper bronzed, statuary bronzed and satin brassed or bronzed.
Brass—Polished, bronze metal antique or chromium plated.

·Pyx· Coin Operated Lock

In this type of lock any foreign body put in the coin slot can pass right through the mechanism without interfering with its action. The movement of the lever to the locked position closes the coin slot and prevents a second coin being inserted. The box has a coin capacity of 200 pennies. The fixing is by means of an Allen bolt screw bolting the case to the handle and is secret, no screws being visible when the lock is fixed.

Construction: The outer case is of bronze metal.

Finish: Dull steel bronzed or chromium plated.

·Grip· Door Closer

This door spring is designed for use on doors fitted with coin-operated locks and is fitted on the hinge side opposite the lock. It exerts its maximum force when the door is nearly closed, so as automatically to operate the latch of the coin lock. It may be pivoted out of use if desired.

Finish: Polished brass, bronze metal antique, nickel plated or chromium plated.

Compiled from information supplied by:
William Newman & Sons Ltd.
Address: Hospital Street, Birmingham.
Telephone: Aston Cross 3221.
Telegrams: Checks Birmingham.

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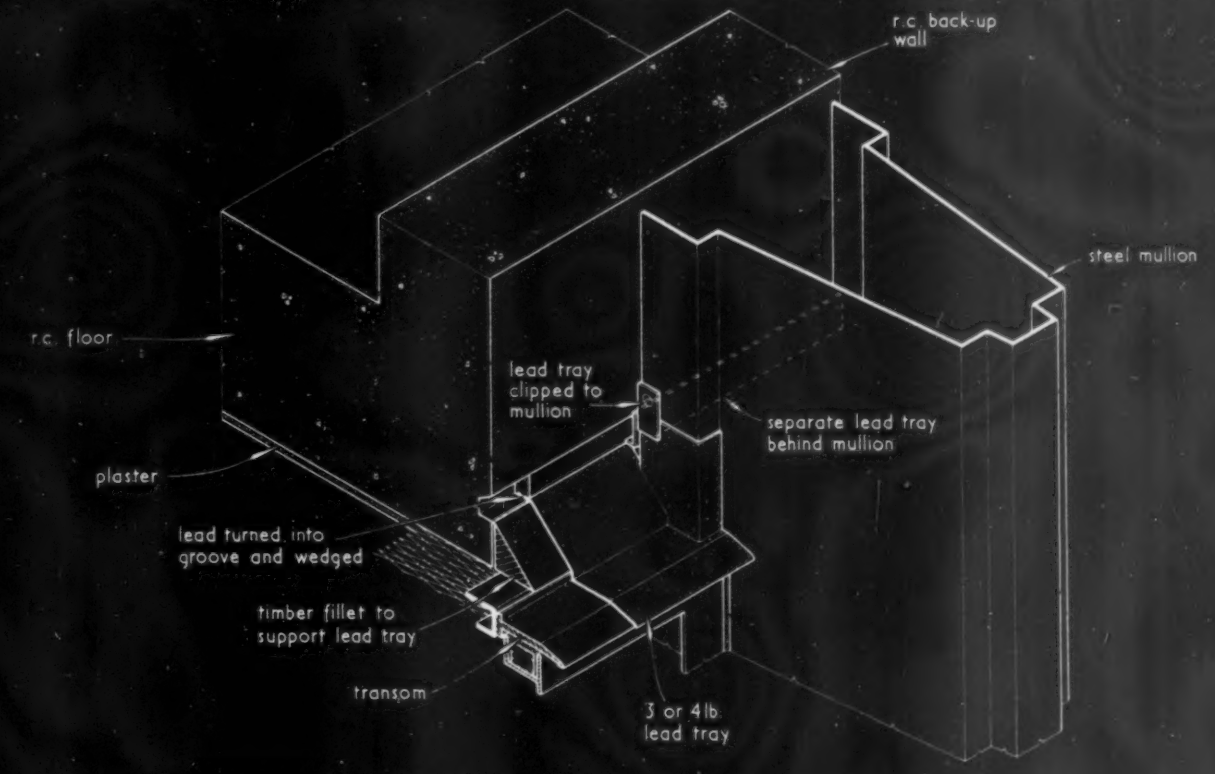
Md8

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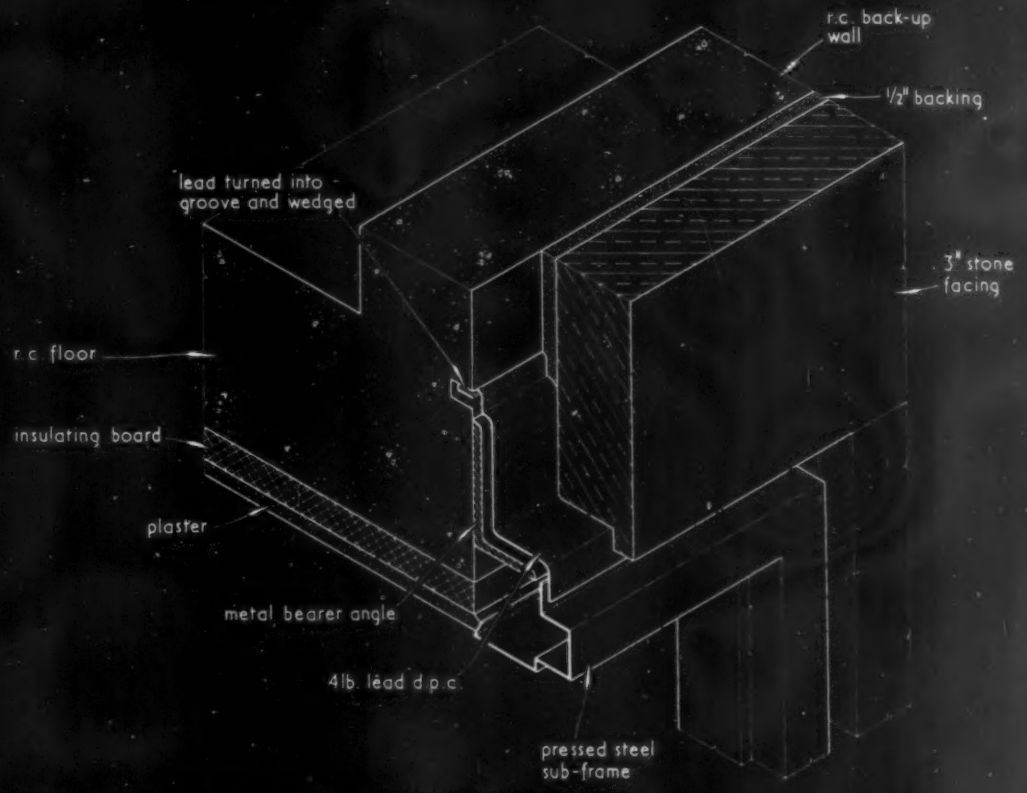
PRODUCTS | D.P.C'S AND CLOAKS | LEAD

26.A4

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● LEAD TRAY TO HEAD OF OPENING IN CURTAIN WALL



D.P.C. AT HEAD OF OPENING IN WALL WITH PERMEABLE FACING

LEAD D.P.C'S TO HEADS OF OPENINGS

Compiled from information supplied by Lead Development Association

26.A4 LEAD FLASHINGS TO HEADS OF OPENINGS

This Sheet is one of a series on lead and its applications and describes its use for flashings to heads of openings.

General

This Sheet, together with Sheet 26.A5 on lead d.p.c's to faced walls, illustrates the use of lead in typical new forms of construction. The ease with which lead can be formed into special shapes and bedded close to the structure makes it as readily adaptable for these applications as for traditional work.

Lead Tray to Head of Opening in Curtain Wall

The detail on the upper face of the Sheet shows a solution to the problem of moisture penetration from condensation between a curtain wall and the structural wall of the building, where the space between the two skins is bridged, as at the heads of openings. A small tray of 3 or 4 lb. lead is shown fitted over the transom section at the top of the window frame and this collects and sheds the moisture from condensation. The back edge of the tray is turned into a groove in the concrete and wedged, and it is held to the metal mullions by clips. A separate tray behind the mullion is similarly fixed. The lead trays can be preformed for building in as the work progresses.

D.P.C. to Head of Opening in Wall with Permeable Facing

The drawing on the lower face of the Sheet shows the provision of a lead d.p.c. at the head of an opening where a solid wall has a permeable facing. After heavy saturation, moisture collects at the head of the opening and would, if absorbed into the body of the wall, have a very short distance to travel to the inner face. The 4 lb. lead d.p.c. illustrated provides a permanent impermeable barrier between the facing material and the metal trim of the opening and sheds the water outwards. Where lead d.p.c.s are built-in in contact with fresh Portland cement concrete or mortar, they should be coated with bitumen paint (see Sheet 26.A1, heading *Protection*).

Further Information

The Lead Development Association maintains a Technical Information Bureau which is available to answer questions and advise on technical problems dealing with the use of lead in building.

Compiled from information supplied by:

Lead Development Association

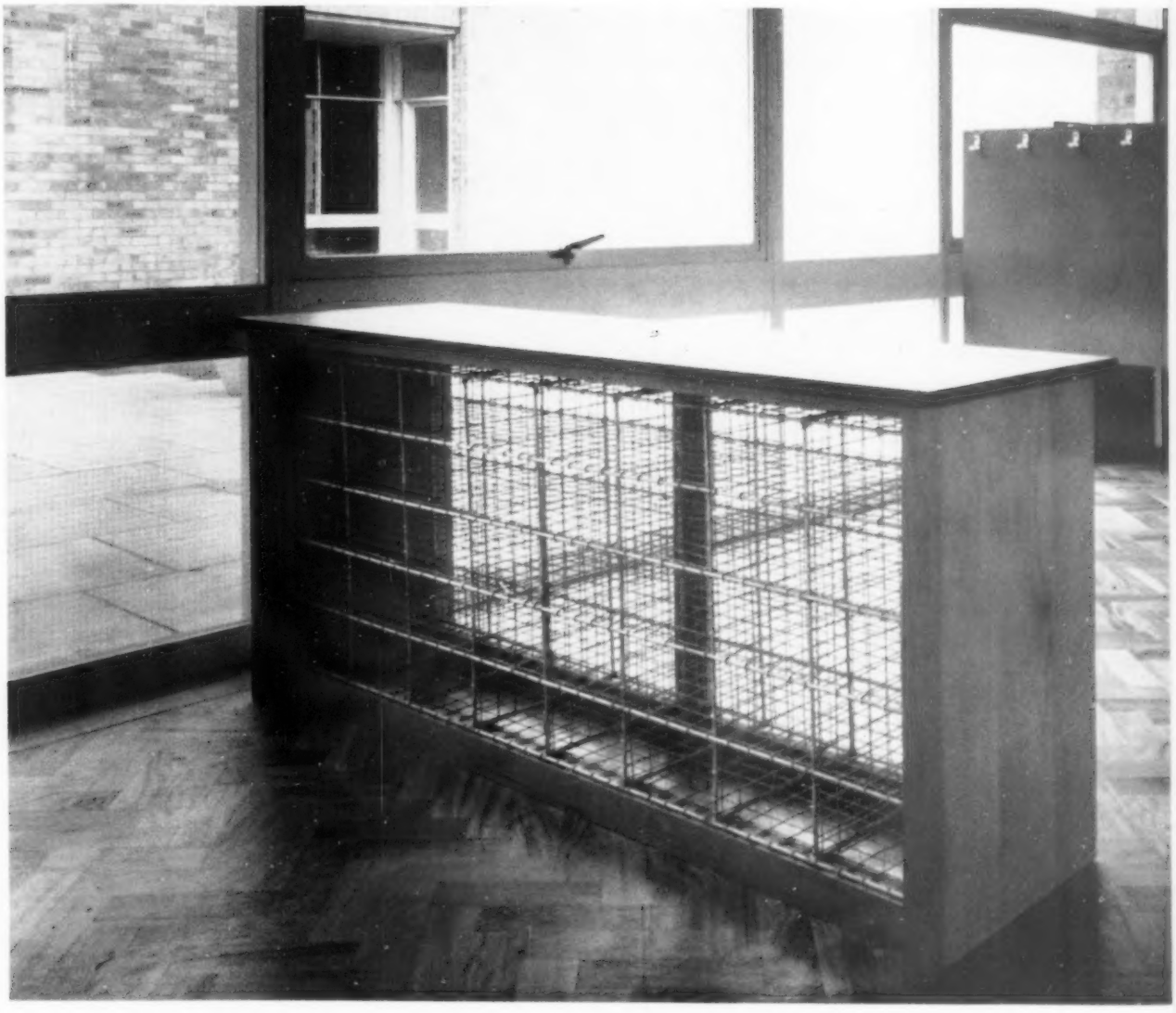
Address: 34, Berkeley Square, London, W.1.
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working detail

SHOE LOCKERS: SCHOOL AT CHESHUNT, HERTS.

G. C. Fardell, Architect to the Hertfordshire County Council

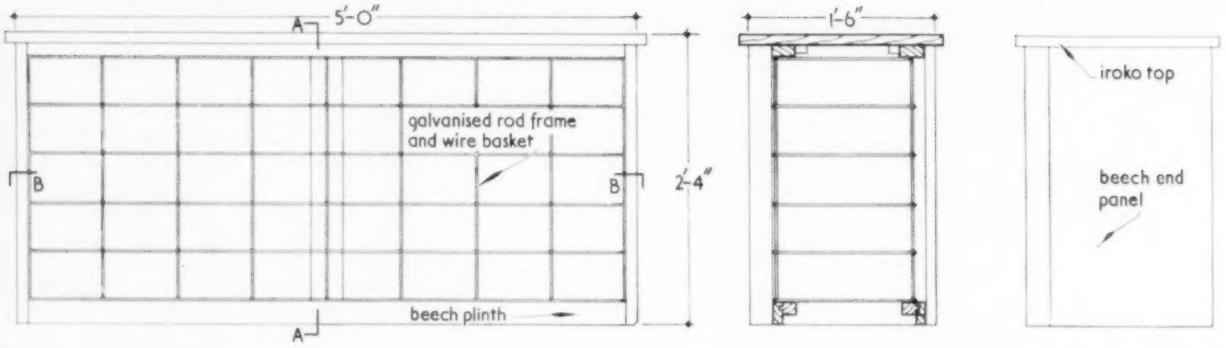


This is the first of a small series of details we are publishing of fitted furniture used in Hertfordshire schools. The virtue of these designs is that they have been developed and refined over a period of years and have, therefore, been satisfactorily tested both functionally and for their specification and construction. This first example is the standard shoe locker placed in the open circulation/practical area of each class space.

working detail

SHOE LOCKERS: SCHOOL AT CHESHUNT, HERTS.

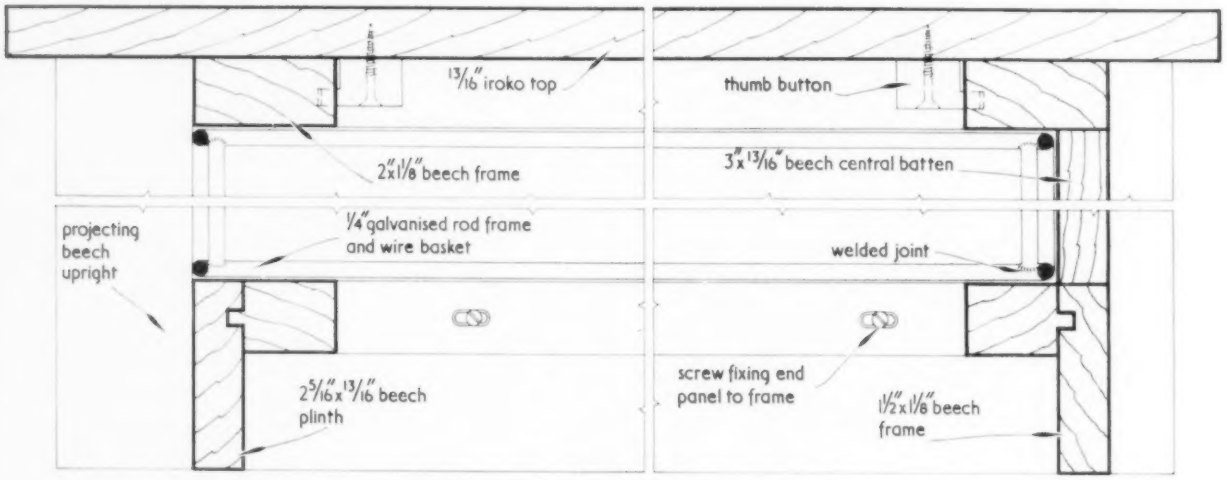
G. C. Fardell, Architect to the Hertfordshire County Council



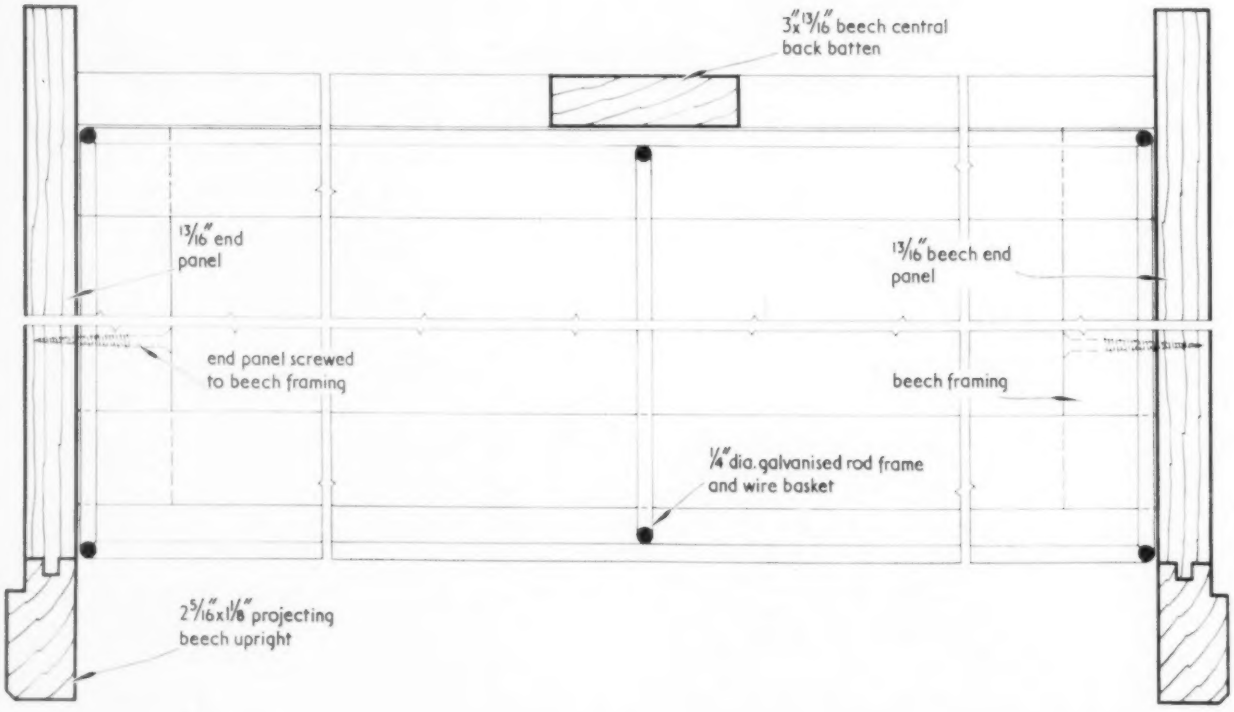
ELEVATION. scale 3/4"=1'-0"

SECTION.

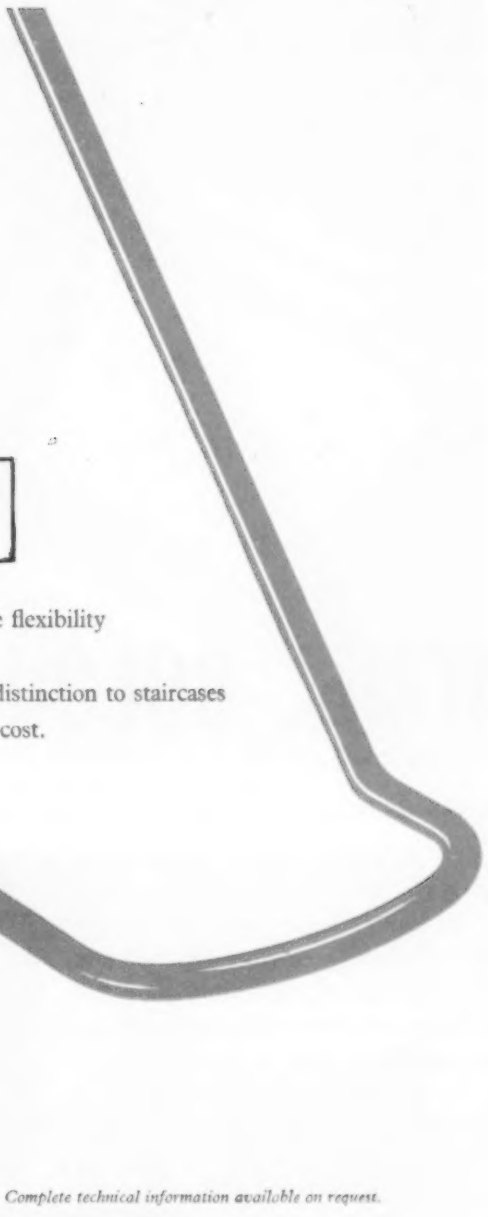
END ELEVATION.



SECTION A–A. scale 3/8 full size



PLAN AT B–B. scale 3/8 full size



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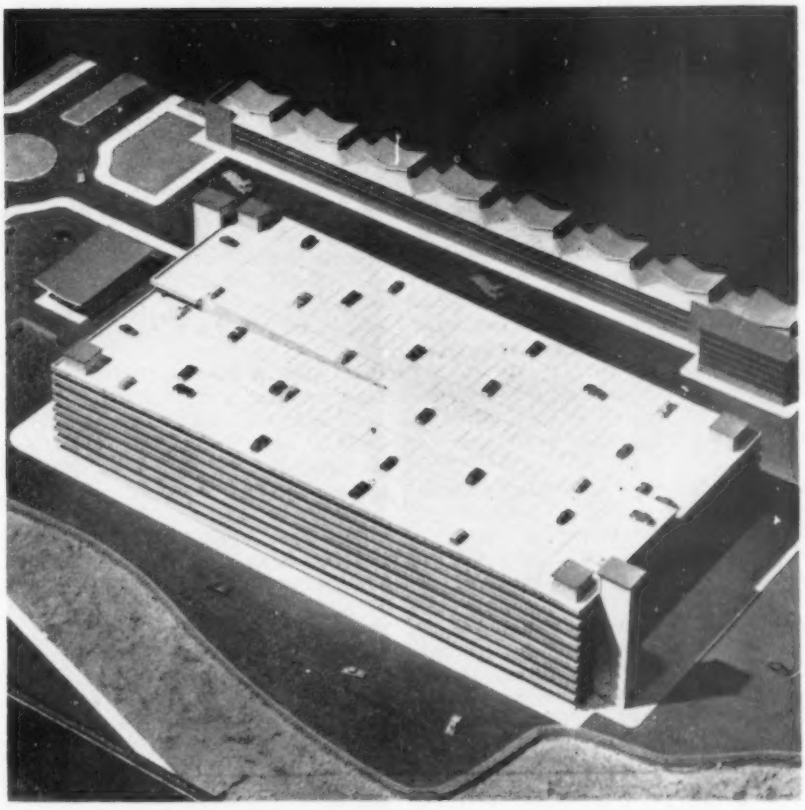
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Car Park at Longbridge



Lift slab construction has been used for the multi-storey car park at Longbridge, designed by Harry W. Weedon, F.R.I.B.A., & Partners, which claims to be the largest multi-storey car park in the world and is now approaching completion. The building is for Austin Motor Company Ltd., and is a storage park for new cars coming off the conveyor, and when completed it will provide covered accommodation for 3,300 cars, as well as roof top parking, presumably for staff cars. The nine-storey building will provide 17 acres of parking space on a two-acre site, and the cost per car space is around £165.

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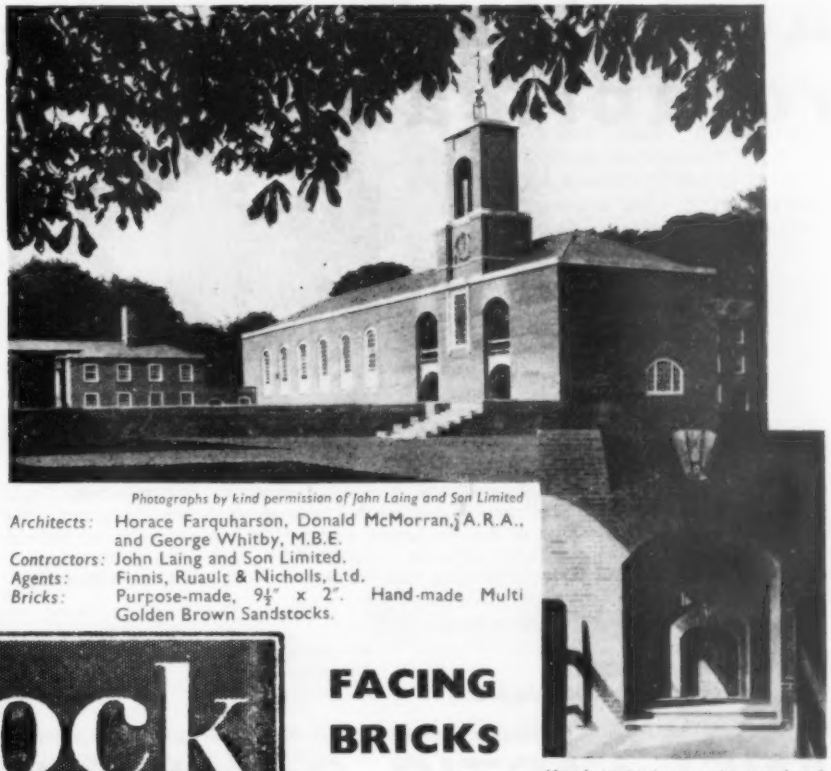
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Announcements

PROFESSIONAL

Peter Daniel has resigned his appointment as deputy chief architect of Peterlee to become chief architect to Wm. Loudon & Son, Lanarkshire, primarily to prepare plans for the Bothwell Castle project. His office and private address is, Cambusnethan Priory, Wishaw, Lanarkshire. (Telephone: WISHAW 2245.)

A. C. McNab, A.R.I.B.A., A.M.T.P.I., and E. R. H. Jamieson, A.R.I.B.A, have begun practice under the style of McNab and Jamieson. For the time being they will practise from 28, Ripplevale Grove, Islington, London, N.1. (Telephone: NORTH 6364.)

E. W. H. Gifford & Partners have opened additional offices at 23/27, Carlton Crescent, Southampton. The partner in charge is H. E. Lewis, M.SC., D.I.C., who will be pleased to receive any trade literature.

P. H. Rodgers, B.ARCH., A.R.I.B.A., at present chief assistant architect to Whiston Rural District Council, will be taking up an appointment as chief assistant architect to Kirkby Urban District Council, Kirkby Hall, Hall Lane, Kirkby, near Liverpool, and will be pleased to receive trade literature at the new address after June 5, 1961.

Victor J. C. Waring, A.R.I.C.S., Gerald J. Shaw, A.R.I.C.S., and Donald G. Blyth, A.R.I.C.S., A.I.Q.S., chartered quantity surveyors, have opened new offices at 4A, Commercial Square, Haywards Heath, Sussex, where they will be pleased to receive trade literature.

W. S. Hattrell & Partners, F/A.R.I.B.A., have taken into partnership George R. Unwin, A.A.Dipl., A.R.I.B.A.., at 15, Piccadilly, Manchester. Gordon W. Hammond, A.R.I.B.A., at 1, Queen's Road, Coventry, and John Roake, A.R.I.B.A., at 21, Cleveland Place, King Street, London, S.W.1.

David Stern & Partners (David and Ruth Stern, A/A.R.I.B.A.), of 24, Gloucester Place, W.1, announce that Ronald Trebilcock, A.R.I.B.A., who has for some time been associated with the practice, has become a full partner.

E. Langford Lewis, A.R.I.B.A., has been appointed deputy county architect to the Denbighshire County Council.

TRADE

The Croft Granite, Brick & Concrete Co. Ltd. have appointed two new directors to their board. They are Sidney Poole who has been appointed general sales manager of the Croft Division and Arthur Gibson who has been appointed general works manager of the Croft division.

Richard Tiles Ltd., of Tunstall, Stoke-on-Trent, have opened a new factory in Melbourne, Australia.

The board of Heating Investments Ltd. has been reconstituted. D. S. Eaton, K. G. Crack and Mrs. E. C. Smith have resigned. K. G. Crack is continuing as technical consultant and A. C. Meech remains a director. B. H. Gosling and R. J. McCreery have been appointed to the board as directors, as company secretary and chairman respectively.

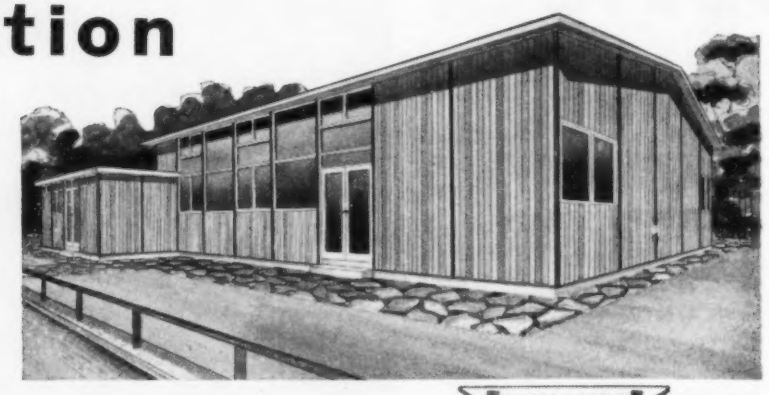
Scaffolding (Great Britain) Ltd. announce that the telephone numbers of their depot at West Savile Terrace, Newington, Edinburgh, have been changed to NEWINGTON 3191 and 1543.

E. Jones has been appointed Midlands area sales engineer for David Brown Construction Equipment Ltd.

Val de Travers Asphalte Limited announce the resignation from the board of A. A. Chant by reason of ill health. T. J. Harrison, A. G. P. Lincoln and A. J. B. Thornton have been elected to the board.

J. B. Hardwick has taken up the position of resident representative in Ghana for Williams & Williams Ltd. His offices are with the Accra agents, the Ghana Consolidated Machinery & Trading Company Limited.

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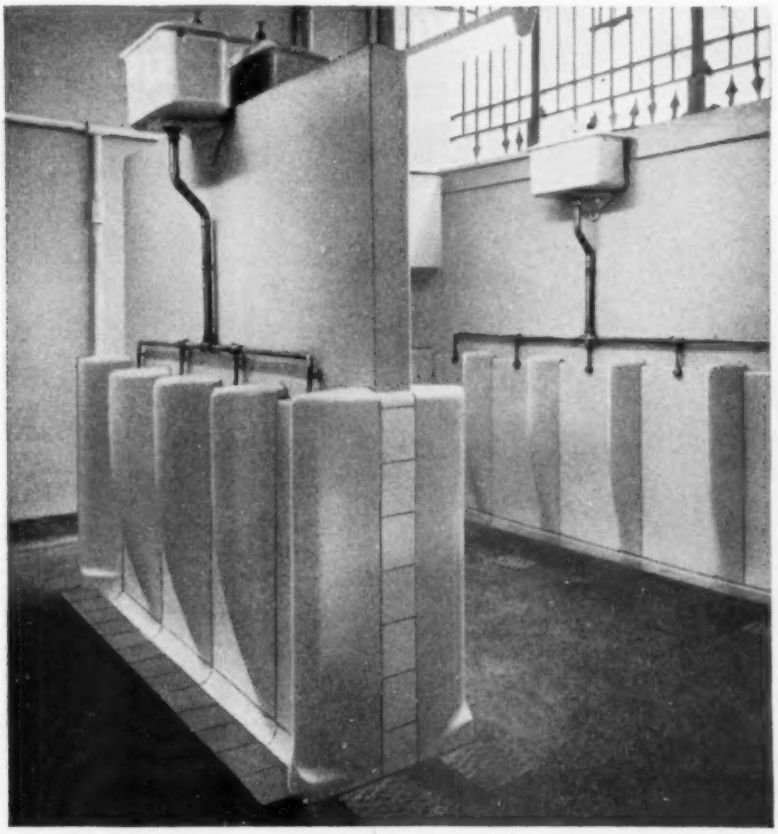
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For some time now, 'Standard' vitreous china sanitary equipment has been recognised by most Public Authorities as being more hygienic than non-vitreous ware. This is because 'Standard' vitreous china is fired at a very high temperature. As a result, it is a dense and non-absorbent material which does not depend on its glaze to make it watertight. Being non-porous, it is impossible for germs to lodge and breed in it.

This is strikingly borne out in the use of the new 'Standard' Vitural slab urinal which is being installed in an ever increasing number of public conveniences. This is the first vitreous china full-length slab urinal ever to be manufactured. As well as being germ-free, it also has the important advantage of being odour-free. Normal cleaning alone keeps the Vitural (because it is made from vitreous china) free from those unpleasant smells which in the past have been taken for granted in public conveniences. The Vitural itself is available in three basic forms:—

(a) *Slabs 18" wide plus divisions. Total width per stall 24".*

(b) *Slabs 15" wide plus divisions. Total width per stall 21".*

(c) *Slabs 18" wide with no divisions.*

In (c) the urinal is free from protruding division pieces and each slab has a slightly concave shape. End screens are either free-standing or designed for fitting against or into an end wall. Floor channels and high level cisterns are also of vitreous china. The range of cisterns is from one to six gallons.

Another 'Standard' vitreous china aid to public hygiene is the new Handspray basin which can be used in public conveniences. The main advantage of the 'Standard' Handspray basin is that it makes it easier for a user to wash his hands. There is no need to plug the basin, and then mix hot and cold water to the right temperature for washing. The user just turns on the mixer tap, and water of the right heat is sprayed over his hands, which he can soak and rinse in a matter of seconds. He also does not have to empty and swill it out when he is finished.



Another 'Standard' vitreous china product much in favour with Local Authorities is the Trimline Bathroom suite which has been designed specifically for low-cost housing projects. Despite its very low price, the Trimline suite, which consists of a wash basin and water closet, is exceptionally well-designed. The wash basin is available on cast-iron wall brackets or a pedestal—the closet of the wash down type coupled to a low-level cistern. Strong and permanently hygienic, the Trimline suite has all the advantages of more expensive luxury suites and has already figured prominently in many new housing estates.



'Standard' vitreous china equipment has a very long life, and a high resistance to harsh treatment. The percentage of replacements is low, and it is easy to clean and maintain. These qualities make 'Standard' vitreous china ware a very practical proposition for Local Authorities.

164

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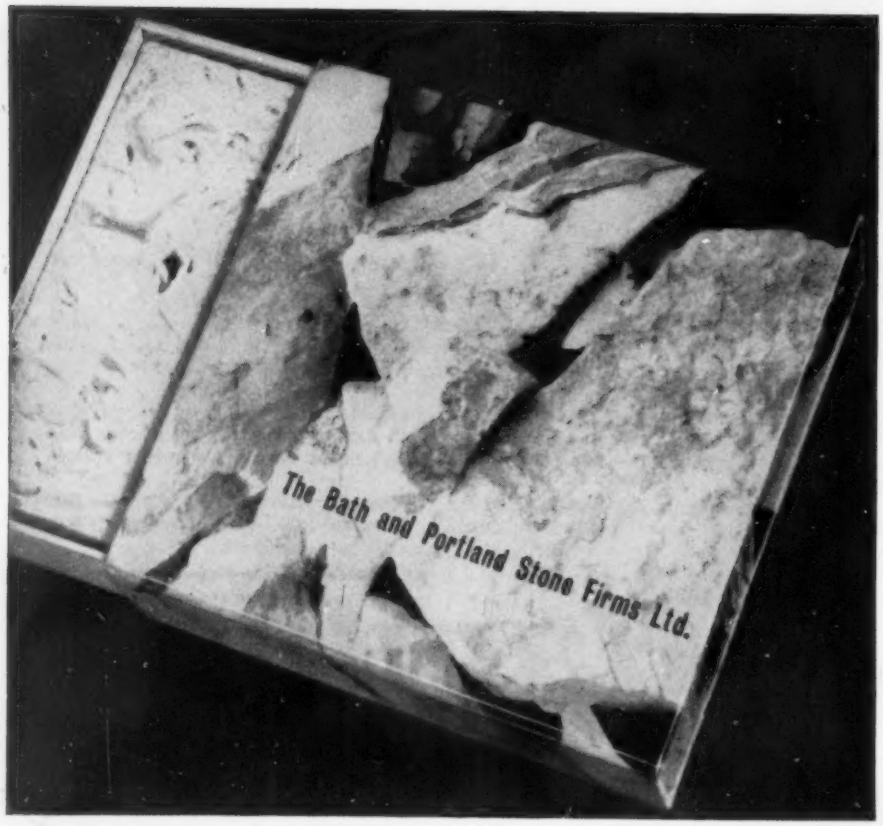
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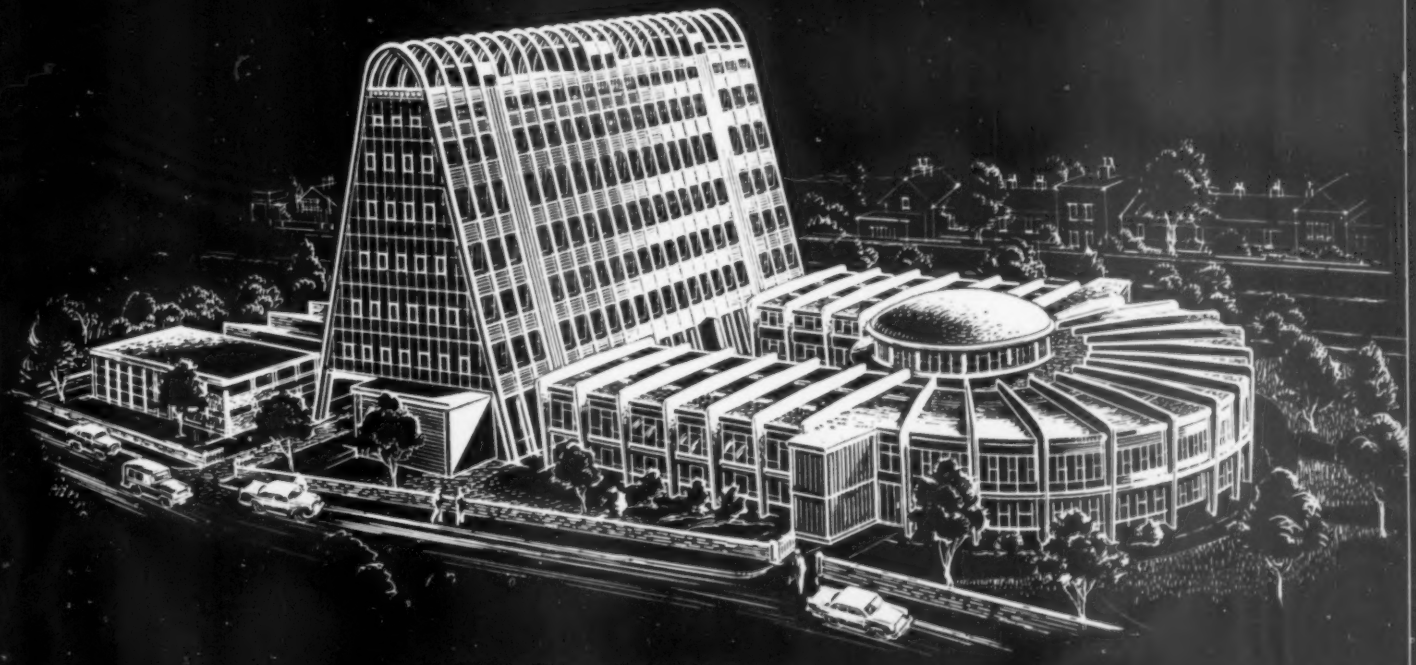
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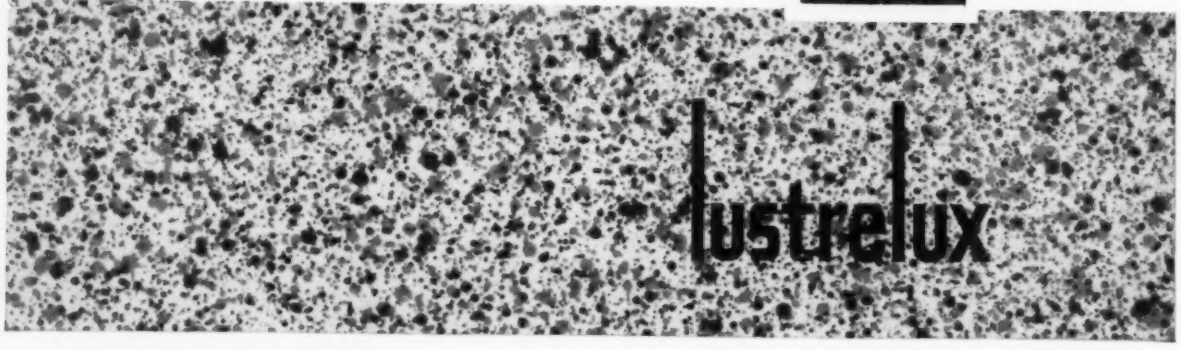
EMALUX
New Abbattoir, Melton Mowbray
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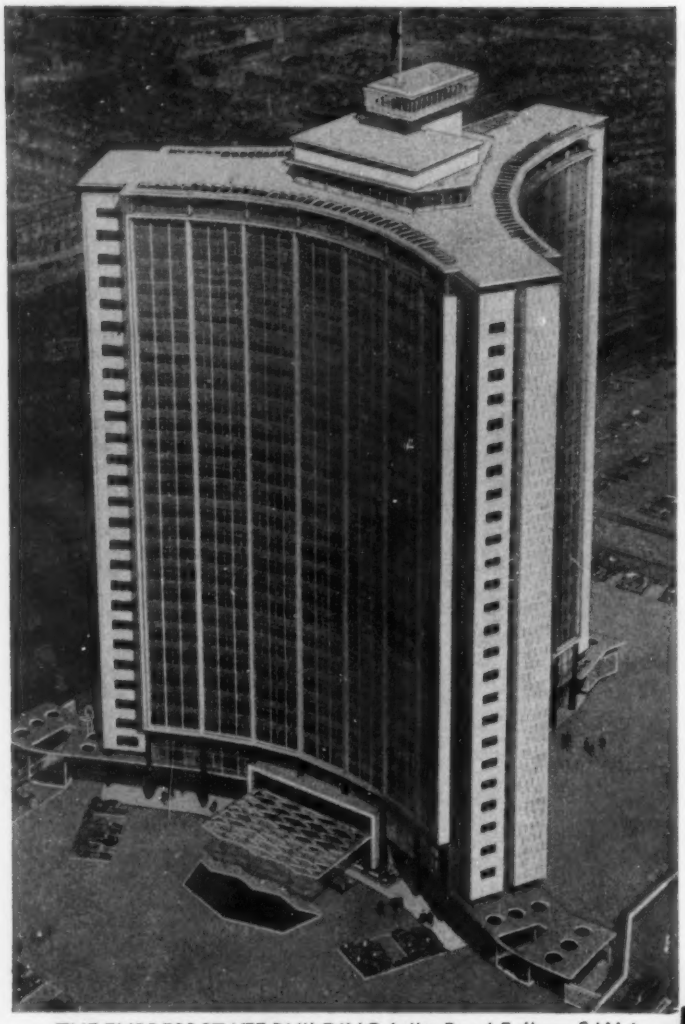
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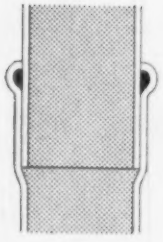
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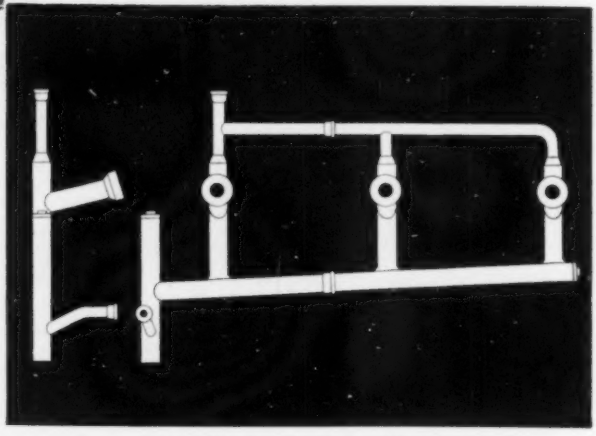
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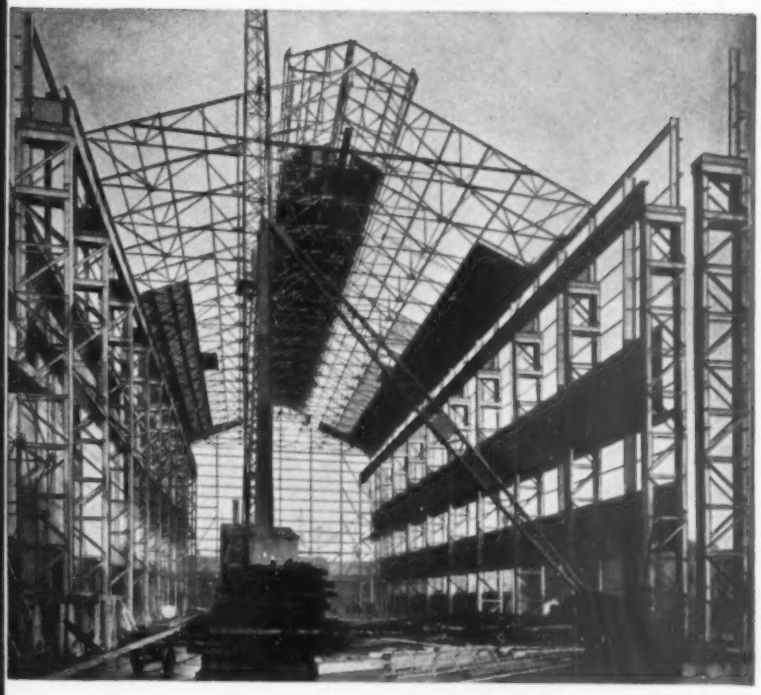
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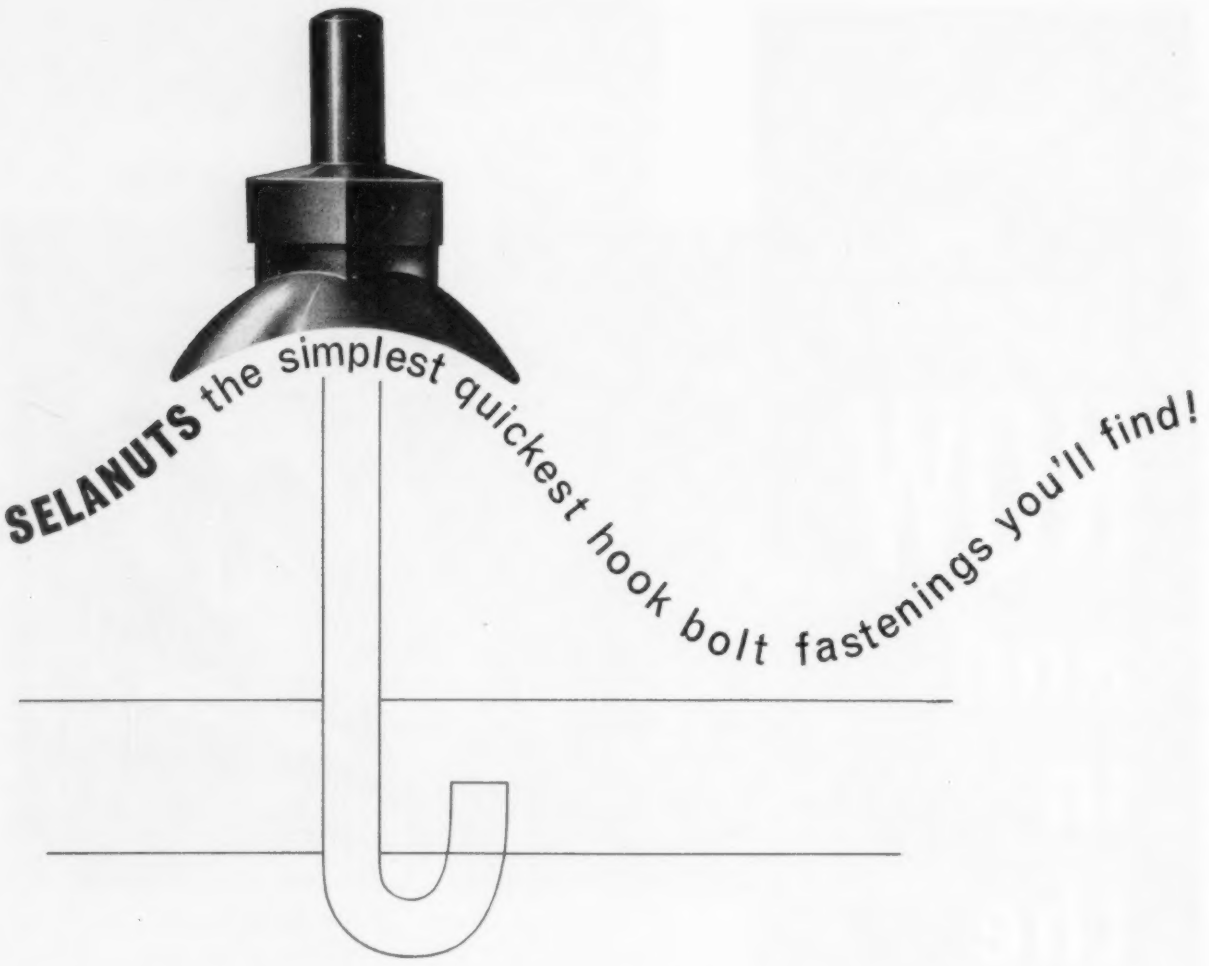
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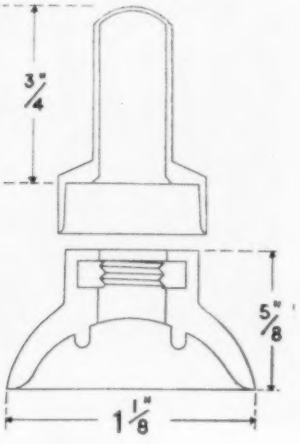


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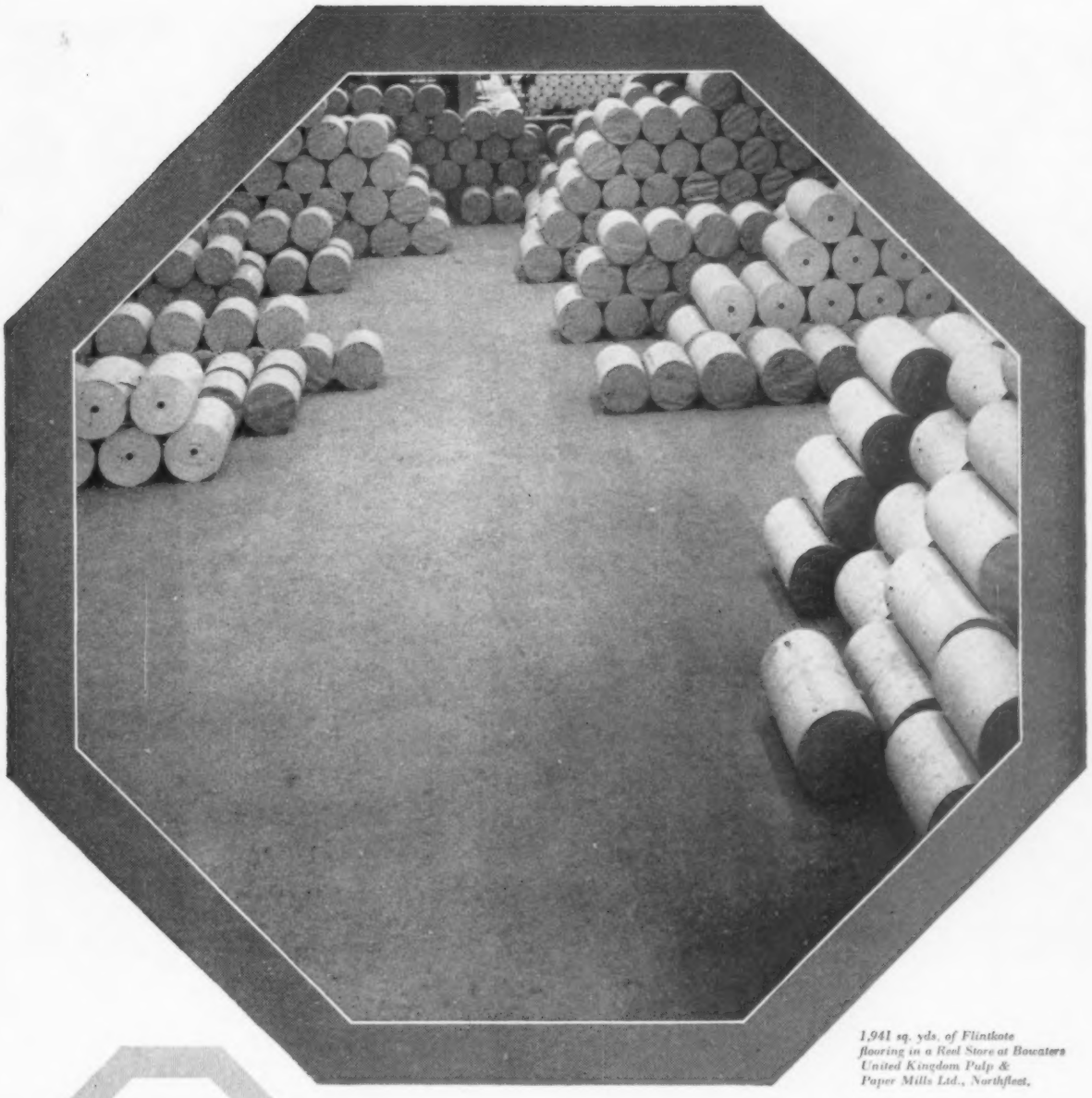
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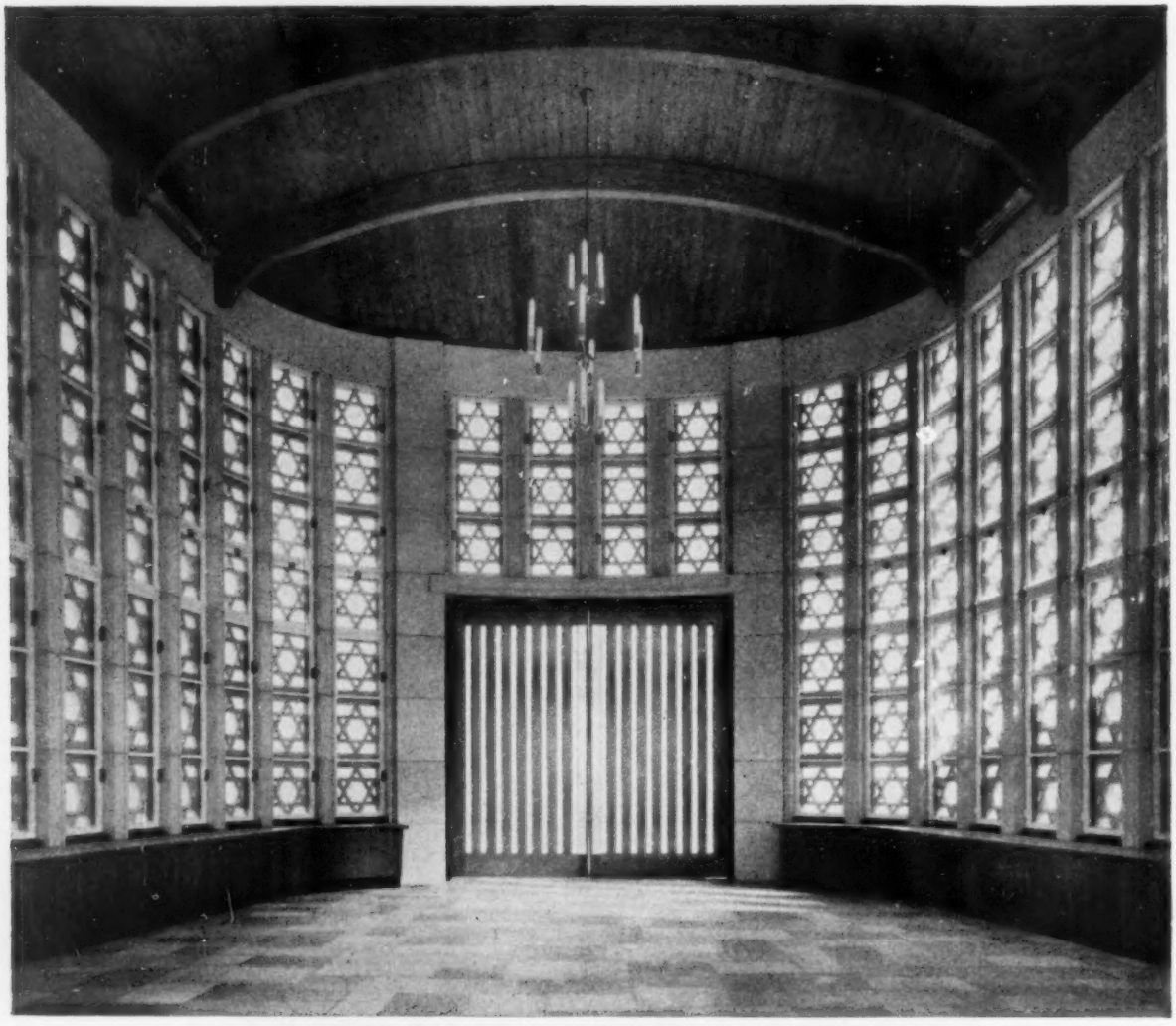
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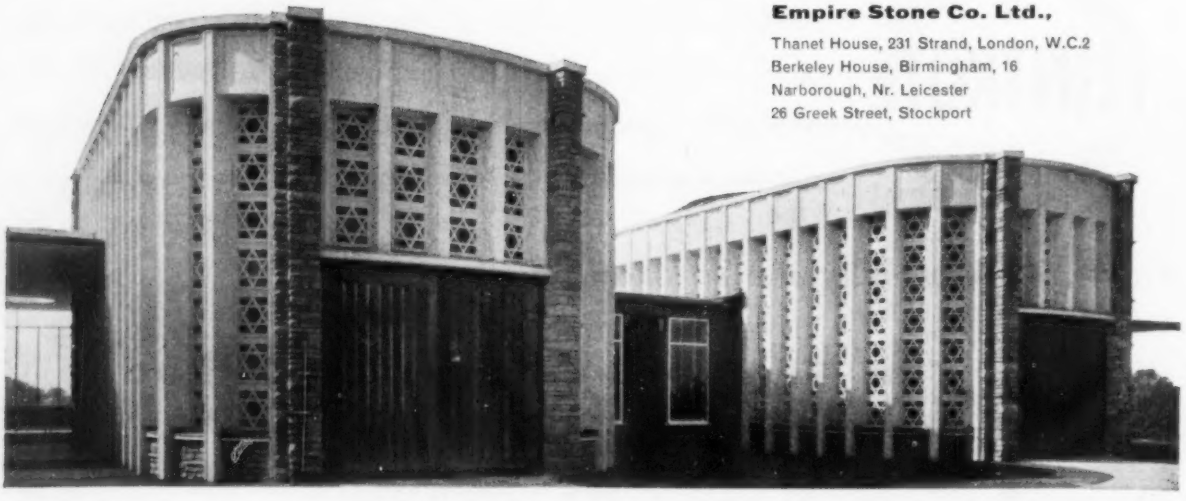


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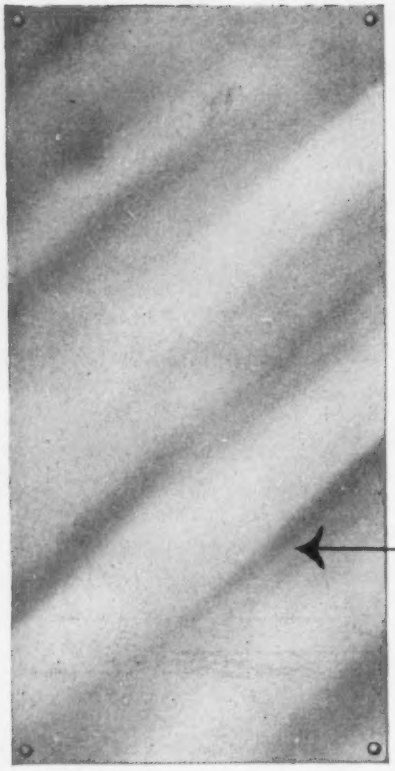
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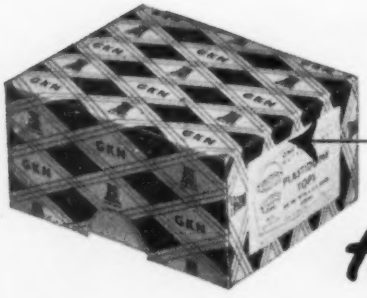
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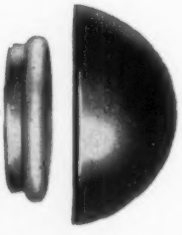


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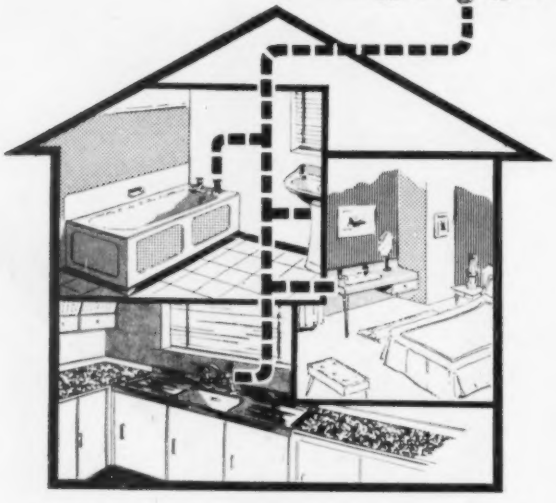
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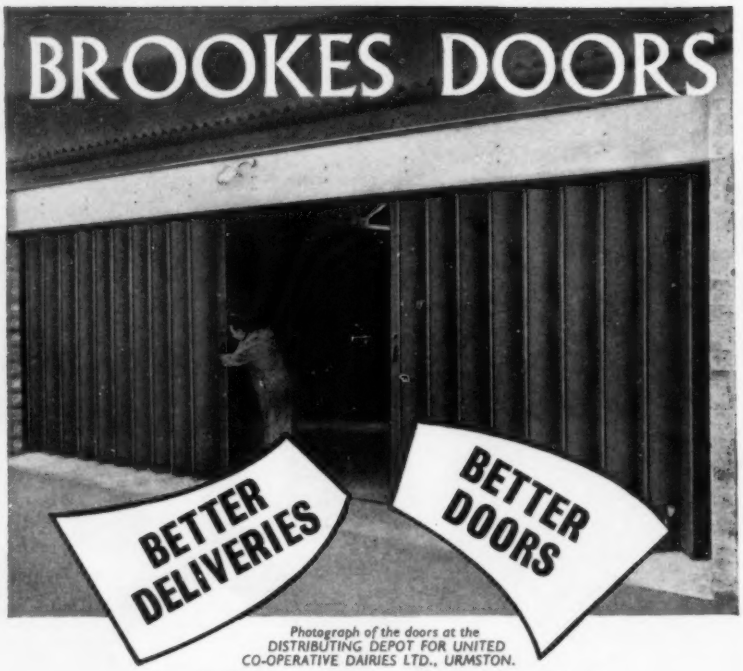
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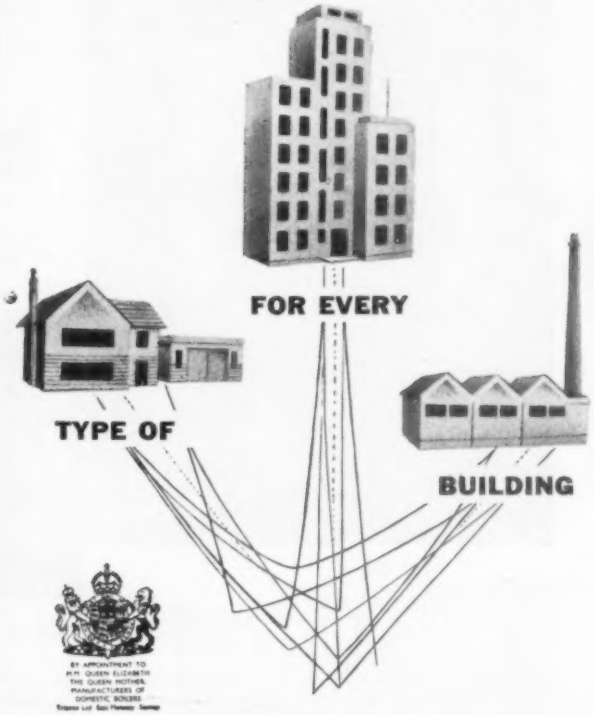
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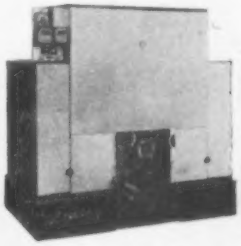
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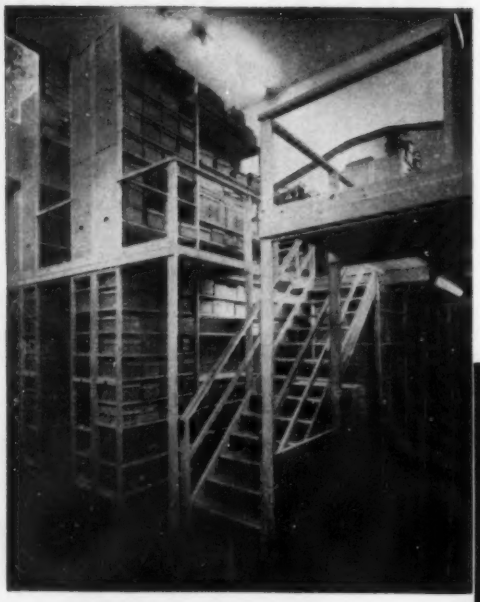
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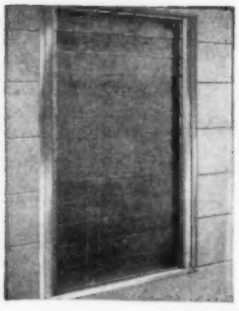


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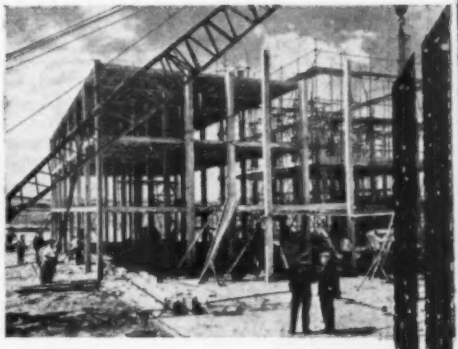


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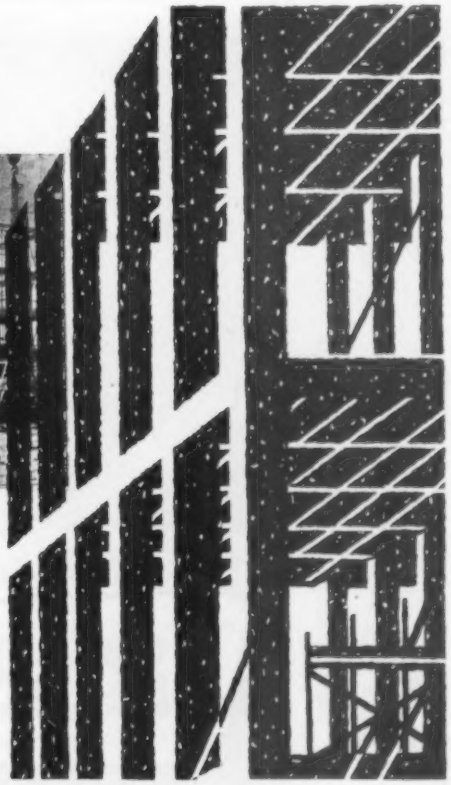
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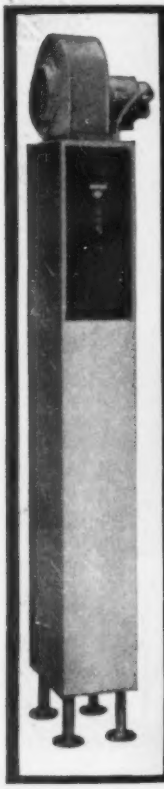
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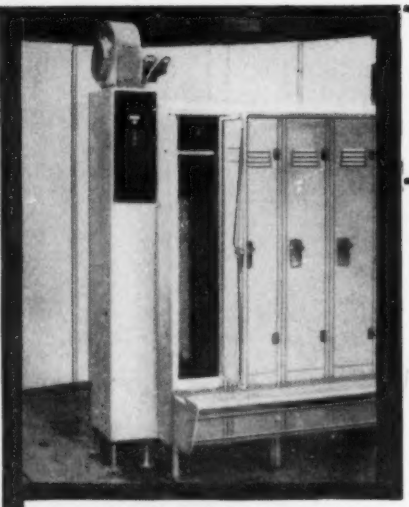




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The illustrations show a typical heater unit, and also the unit fitted to a single tier locker aisle.

Plenum heat unit

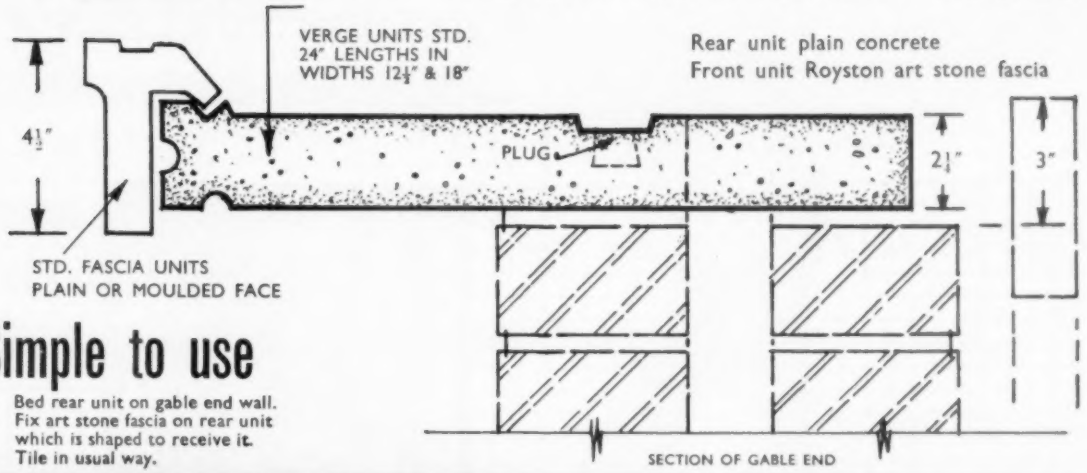
The unit is designed for use with any of our standard types of locker, and is specifically intended for the smaller size of Amenity Block which does not justify a centralised heating plant. It fully covers all the Welfare requirements for heating and drying at very low running costs with most modest capital outlay.
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Simple to use

A. Bed rear unit on gable end wall.
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A retarded hemi-hydrate plaster, ready-mixed with Vermiculite as an aggregate, this new 'Sirapite' product is an effective bonding medium for plastering on concrete, pre-cast and in situ. Application may be followed by an undercoat and finish coat, or a finish coat only, of the appropriate 'Sirapite' plasters.

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THE PERFECT ROOFING MATERIAL WITH THE LONGEST LIFE

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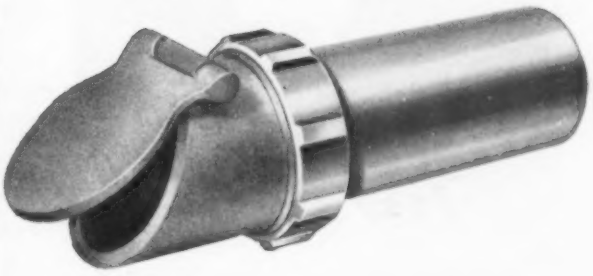
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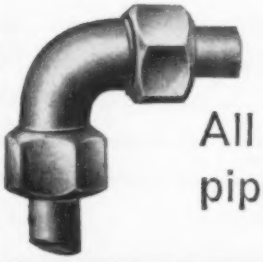
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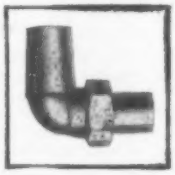
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ALUMINIUM
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GARAGE DOOR

Price Complete £17-10-0 ex-works



the ARCHITECT is happy

for he knows the Garador's clean simple lines will blend equally well with contemporary or period designing. Its price will be right combining high quality with low cost.



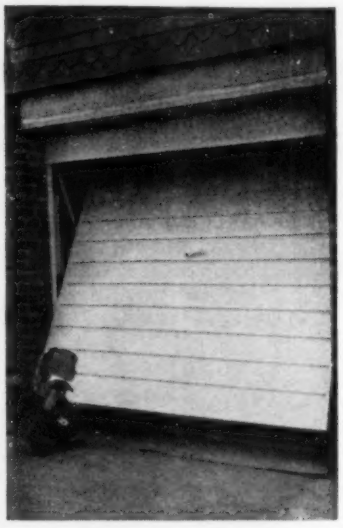
the BUILDER is happy

for he knows the Garador, complete with fittings, will arrive on time at the site and that its installation will take only a matter of minutes, for there are no sidewall or roof fixings.



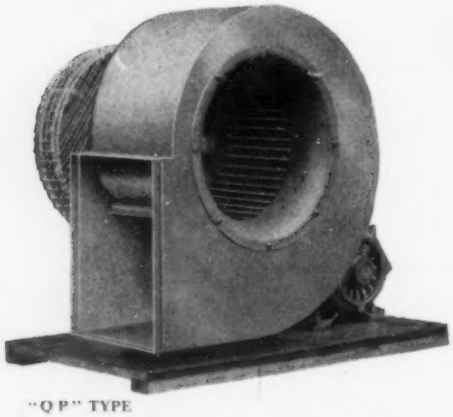
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for he knows the Garador operates at the touch of a finger, being counterbalanced throughout the whole of its movement. Its aluminium construction offering a lifetime of maintenance-free service.



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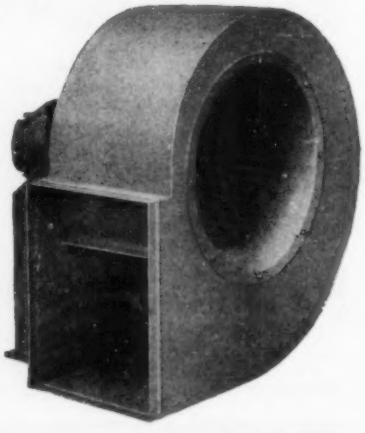
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Quiet, please!

The "Q.P." and "Q.M." MULTIVANE CENTRIFUGAL FANS were specifically designed to meet a real need for high efficiency units, with extremely low air and mechanical noise levels, capable of prolonged operation with the minimum of maintenance.

For localised, "built in" ventilating and/or air conditioning systems, where noise levels are specified to be kept at a minimum, these compact Units have received a gratifying welcome from Architects and Heating and Ventilating Engineers, a fact endorsed by the many installations now in operation throughout the country in such buildings as Hospitals, Schools, Banks, Restaurants, Stores, Laboratories, Lecture Rooms and the like, where quiet is a "must".

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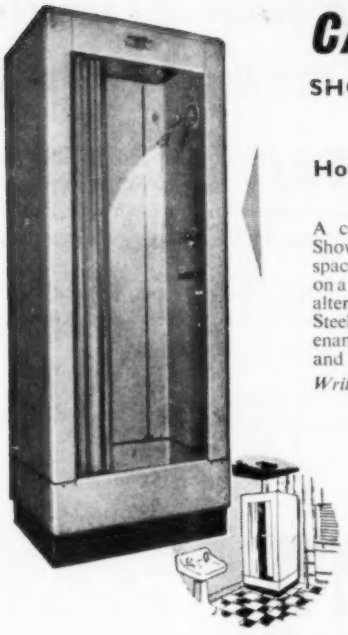


"Q M" TYPE

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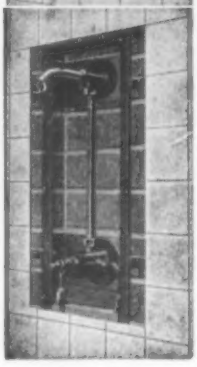
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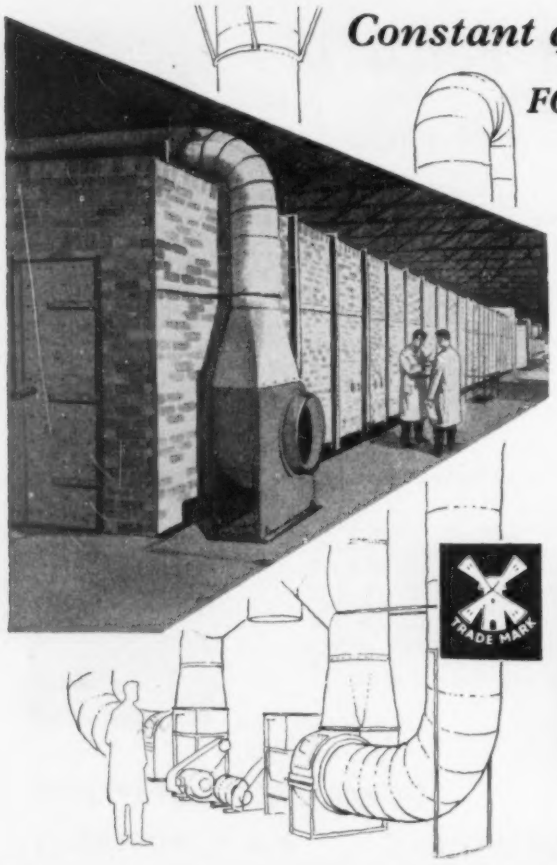
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- Sheeting available in a range of attractive colours.
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WINDMILL QUARRY TILES

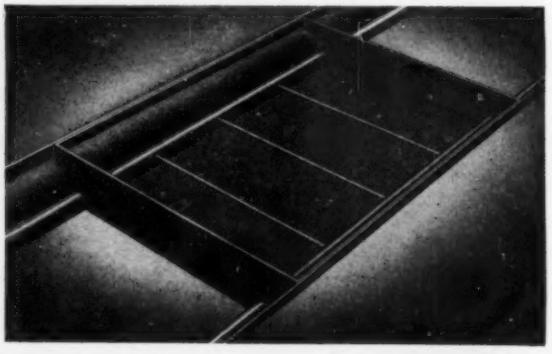
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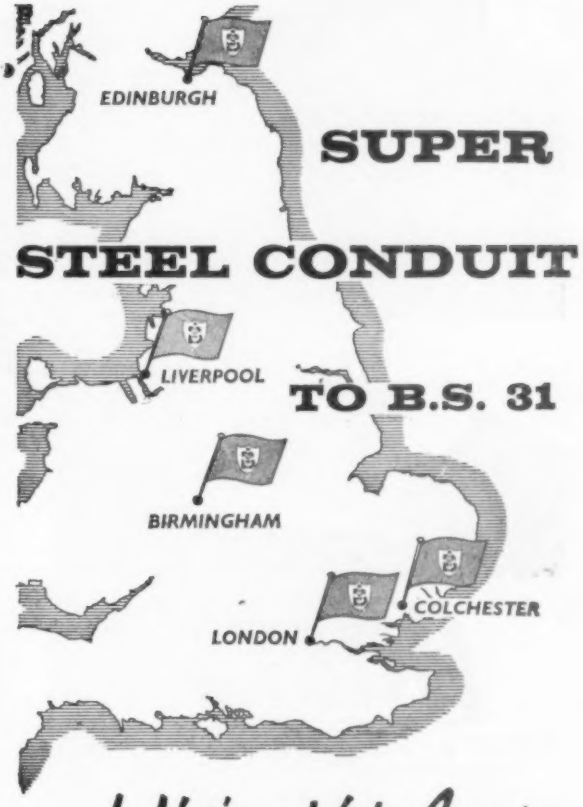
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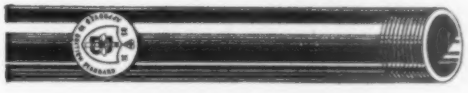
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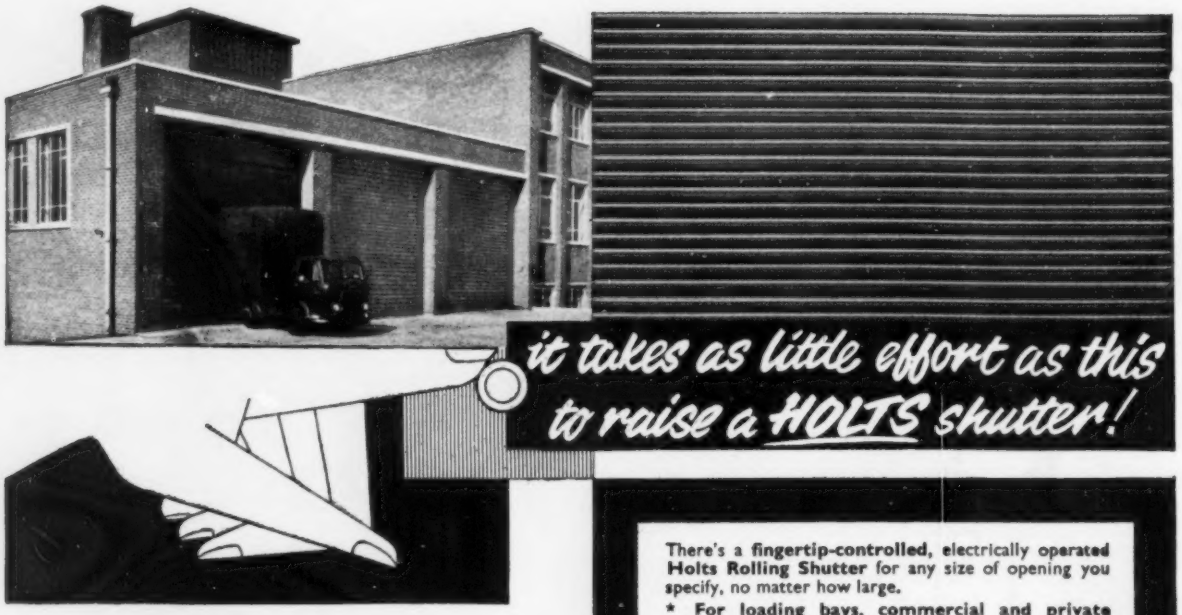
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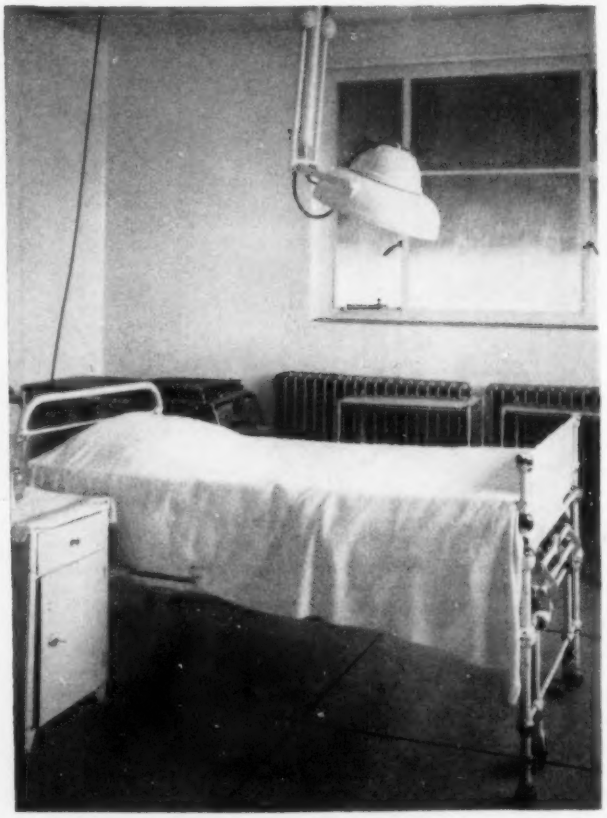
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Barbour Index
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Contirol is polyester resin-glass fibre in corrugated or flat sheet and will be available in a wide variety of roofing profiles. It is expressly produced for daylight roof-lighting, north lights, verandahs, covered corridors, canopies and loading bays.

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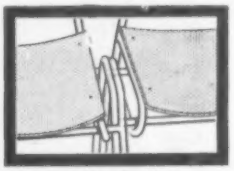
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MS9/18 Remploy/Stafford standard model. Strong tubular steel frame. Preformed, multi-ply backrest and seat. Dimensions: Height 29¾", Depth 18", Seat height 17½", Overall width 20½", allowing a comfortable, linked-together space of 19" per person. Also available in a special Junior size which links at 16" per child.
Registered Design Nos. 893239 and 893941.





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2 MORE REMPLOY STACKING CHAIRS

—always in great demand



MS4 Sturdy, lightweight, continuous tubular steel frame with polished canvas backrest and seat. In red, blue or green. Seat height 18".



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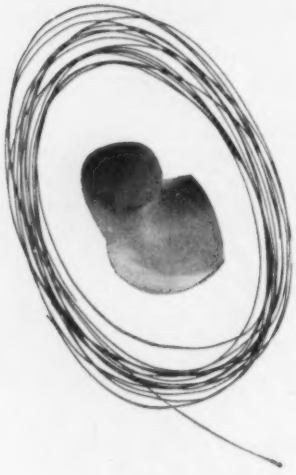
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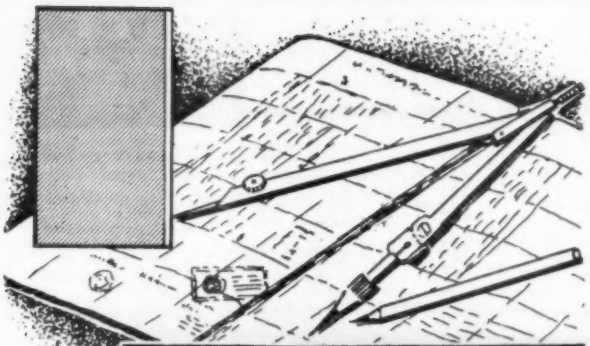


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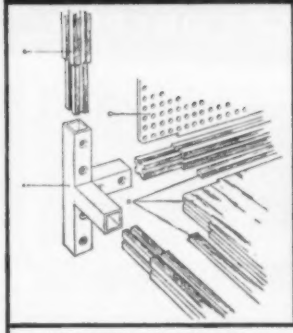
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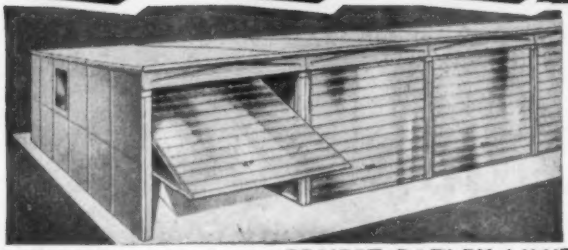


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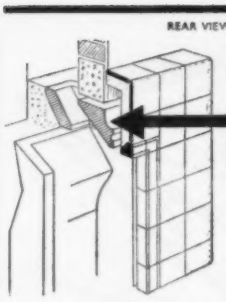
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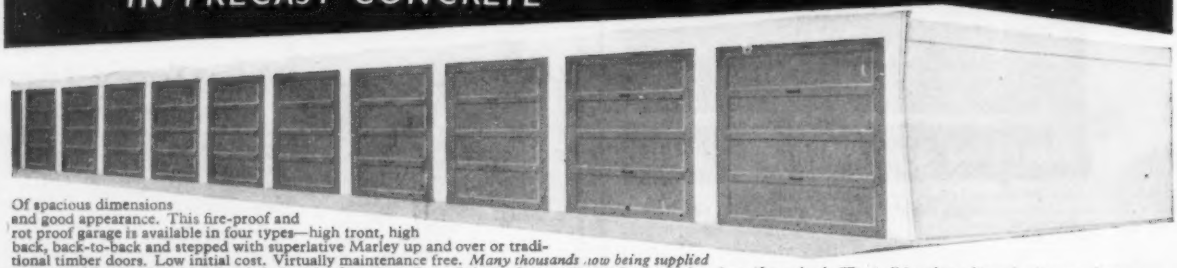
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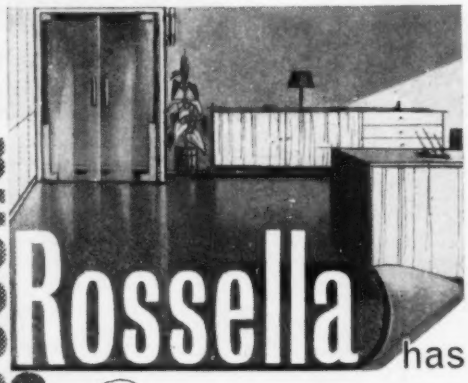
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All applicants should be qualified members of the R.I.B.A. and should preferably hold the diploma of a recognised School of Architecture. For senior positions it is essential that applicants have had experience of the control and direction of staff.

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When applying, quote reference No. 118 (AJ) giving qualifications, age, experience and salary required to:—

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Chief Civil Engineer's Office,
British Railways, London Midland Region,
Stephenson House, 67/87 Hampstead Road,
London, N.W.1.



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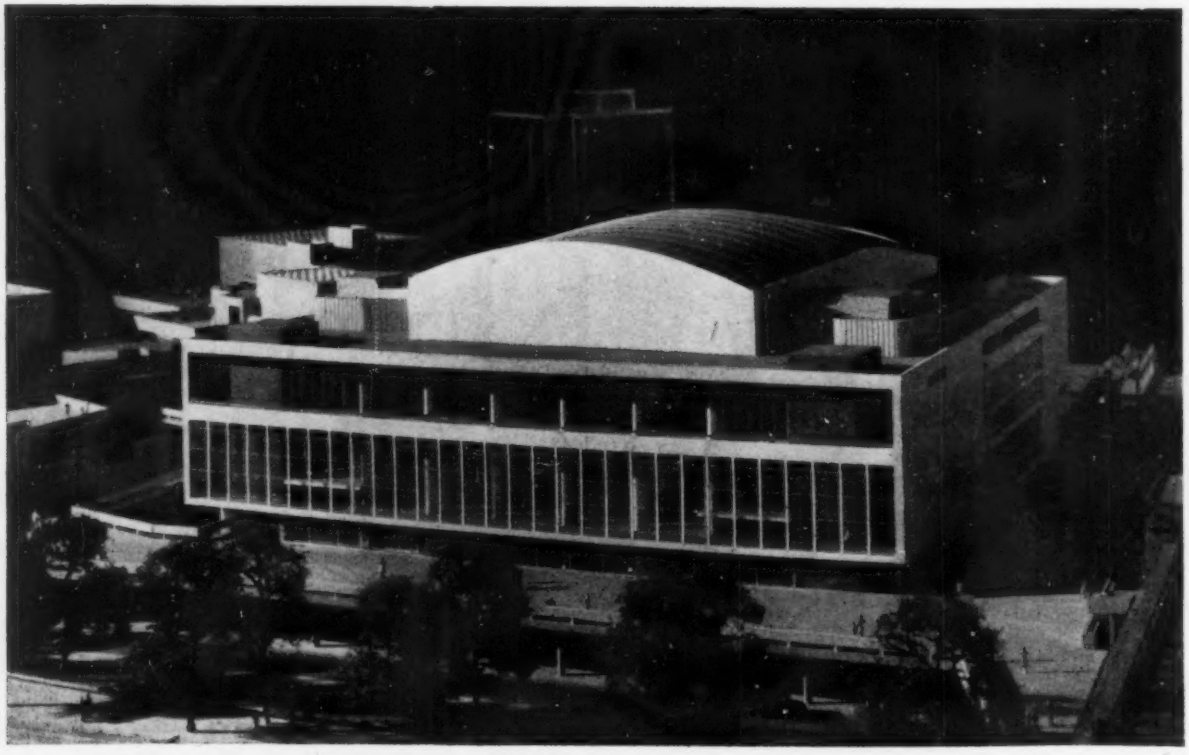
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Application forms and further particulars from Hubert Bennett, F.R.I.B.A., Architect to the London County Council, County Hall, S.E.1, quoting reference EK/1276/5.



CLASSIFIED ADVERTISEMENTS

Advertisements should be addressed to the Advertisement Manager, "The Architects' Journal," 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1, and should reach there by first post Friday morning for inclusion in the following Thursday's paper.

Replies to Box Numbers should be addressed care of "The Architects' Journal," at the address given above.

AIR-MAIL SERVICE available on request.

In response to requests from a number of Overseas subscribers for air-mail delivery of Public and Official Appointment details and Other Appointments Vacant, we have been pleased to arrange that cuttings of all such classified advertisements appearing in the A.J., shall be despatched by air-mail on Wednesday of each week (one day prior to A.J. publication date). The cost of this special service to Overseas subscribers will be 5s. for four weeks (1s. 3d. for each additional week) and prepayment should be sent by subscribers wishing to take advantage of this service. The charge we are making represents only the actual cost of the postage involved.

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AND
ARCHITECTURAL ASSISTANTS

Applications are invited for the above appointments at salaries within the range of Grades A.P.T. IV and VI of the Whitley Council for New Towns Staff salary scales, i.e. £1,140—£1,565 p.a. The commencing salary and grade will be fixed according to the qualifications and experience of the successful applicant.

The principal work for the successful applicants will be in connection with the development of the Town Centre of the new town.

Appointments subject to N.J.C. Conditions, superannuation, medical examination and to one month's notice, in writing, on either side.

Housing accommodation available, if required.

Applications, stating age, qualifications and experience, together with the names of two referees, to be sent to the undersigned.

A. V. WILLIAMS,
General Manager.

Churchill House,
Newton Aycliffe,
Nr. Darlington. TC6672

ARCHITECTURAL ASSISTANT required, unqualified or partly qualified (£685—£1,185). Grade and salary according to ability and experience. Forms from Borough Engineer, Municipal Buildings, Wandsworth, S.W.18. Closing date 31st May. J. NOEL MARTIN, Town Clerk. 7613

CITY AND COUNTY OF NEWCASTLE UPON TYNE
CITY ARCHITECT'S DEPARTMENT

A unique opportunity exists in this office for competent Architects to take part in one of the most ambitious programmes of varied building works in the country, and vacancies in the establishment occur for ARCHITECTS who will be considered on their ability in design, experience, and architectural outlook, in the following grades:—

J.N.C. "C": £1,560—£1,825 per annum.
J.N.C. "B": £1,410—£1,670 per annum.
A.P.T. V: £1,310—£1,480 per annum.
A.P.T. IV: £1,140—£1,310 per annum.
A.P.T. III: £960—£1,140 per annum.
A.P.T. II: £815—£960 per annum.
A.P.T. I: £645—£815 per annum.

The Department is engaged upon a wide and varied programme of major redevelopment schemes embracing multi-storey flats, shopping precincts and associated community buildings, one of which schemes is the Scotswood Road Redevelopment Area to rehouse approximately 5,000 people, and which is expected to cost in the region of £12 million.

Planning work has now commenced on the new Education Precinct in the central area, comprising Colleges of Further Education, Art and Industrial Design, Drama, Commerce and Multi-storey Hostels, which will be the largest development of its kind in the country.

Further projects include: Airport Terminal; Abattoir and Fatstock Market; Vegetable Markets; Central Library; and Divisional Police Headquarters, etc., and a varied programme of normal housing development of a stimulating character.

The department is also engaged on the New Town Hall, where an exceptional opportunity is presented for working on a building of some £4 million in value, and being executed in materials of the highest quality.

Architects wishing to take part in one of Britain's most stimulating programmes should apply immediately for further details and forms of application to George Kenyon, A.R.I.B.A., A.M.T.P.I., City Architect, 18, Cloth Market, Newcastle upon Tyne, 1, indicating the grade for which they wish to apply.

JOHN ATKINSON,
Town Clerk.

Town Hall,
Newcastle upon Tyne, 1
20th February, 1961. TC6084

METROPOLITAN POLICE
RECEIVER'S OFFICE

Applications are invited for the following positions in connection with the design and erection of Police Housing, Police Stations, Single Men's Hostels, Cadets' Residential Training Centres and Magistrates' Courts within the Metropolitan Police District and schemes for major alterations to various Police buildings.

ASSISTANT ARCHITECTS

Salary: £991 p.a. at age 25, rising by annual increments to £1,490 p.a. (Maximum salary on entry £1,318 p.a. at age 34 or over.)
Qualifications: Must be registered Architects.

LEADING ARCHITECTURAL ASSISTANTS

Salary: £1,048 p.a. rising by annual increments to £1,220 p.a.
Qualifications: Intermediate R.I.B.A., H.N.C. or equivalent.

ARCHITECTURAL ASSISTANTS

Salary: £658 p.a. at age 21 rising by annual increments to £1,048 p.a. (Maximum salary on entry £960 p.a. at age 28 or over.)
Qualifications: O.N.C. Intermediate R.I.B.A. or equivalent.

TECHNICAL ASSISTANTS III

Salary: £752 p.a. at age 21 rising by annual increments to £1,043 p.a. (Maximum salary on entry £939 p.a. at age 28 or over.)
Qualifications: Intermediate R.I.B.A./R.I.C.S. (Building) or equivalent.

J. INNES ELLIOTT, B.Arch., F.R.I.B.A.,
Chief Architect & Surveyor.

Apply to:
Chief Clerk,
Architect & Surveyor's Department,
New Scotland Yard, S.W.1. S7252

CITY OF GLASGOW
ASSISTANT ARCHITECTS

The Architectural and Planning Department has a number of vacancies for qualified assistant architects.

The Department has in hand a large, varied and interesting programme of work, including Comprehensive Redevelopment, Multi-storey Flats, Schools and Civic Buildings. The work will provide scope for personal initiative in the preparation of designs and details of schemes upon which construction work will follow.

The salary scale for these assistantships is up to £1,560 with placing according to experience.

A five-day week is in operation.

Advances up to 100 per cent. of valuation will be made available, where needed, for the purchase of suitable houses in or near Glasgow, by successful applicants.

Form of application may be obtained from the Principal Administrative Officer, 20 Trongate, Glasgow, C.1.

A. G. JURY,
City Architect and Director of Planning.
S7268

BOROUGH OF WILLESDEN

Applications are invited for the following permanent appointments:

(*a*) ARCHITECTURAL ASSISTANT, within Grade A.P.T. III (£960—£1,140 p.a.).
(*b*) ARCHITECTURAL ASSISTANT, within Grade A.P.T. II (£815—£960 p.a.).
(*c*) ARCHITECTURAL ASSISTANT, within Grade A.P.T. I (£645—£815 p.a.).

London Weighting is payable in addition to the above salaries.

Candidates for post "A" must be Associates of the R.I.B.A. and Candidates for post "B" and "C" should have passed the Intermediate Examination of the R.I.B.A.

A programme of interesting and varied works is expected to continue for many years and opportunities are offered to imaginative designers of any age with a contemporary and practical outlook.

The appointments will be superannuable and subject to the National Conditions of Service for a five-day week, but the Council is unable to assist with housing accommodation.

Forms of application and conditions of appointment may be obtained from the Borough Engineer and Surveyor, Town Hall, Dyne Road, Kilburn, N.W.6. Applications to be returned to the undersigned not later than 10 a.m. on Monday, 29th May, 1961.

R. S. FORSTER,
Town Clerk.
S7447

LINDSEY (LINCOLNSHIRE) COUNTY COUNCIL
ARCHITECT'S DEPARTMENT

North Lincolnshire is developing rapidly and the work in the Department is growing correspondingly and is of a most interesting nature. Vacancies exist for the following grades of Architects/Junior Assistants:—

(*a*) APT.4 Salary £1,140—£1,310
(*b*) APT.3/4 Salary £960/£1,310
(*c*) APT.3 Salary £960/£1,140
(*d*) APT.1 Salary £645/ £815
(*e*) A vacancy also exists for Engineering Assistant (Heating) APT.3 £960/£1,140.

Commencing salary within the grade dependent upon qualifications and experience. Five Day Week. Post entry training assistance for study. N.J.C. Conditions of Service. Canvassing will disqualify, and candidates must disclose in writing whether to their knowledge they are related to any member or senior officer of the Council.

Applications giving age, qualifications, experience, present post and salary, and names of two referees to be sent to me, County Architect, County Offices, Lincoln, for posts (*a*) to (*d*) by 6th June, (*e*) by 21st June, 1961. S7612

BOROUGH OF MANSFIELD

Applications are invited for the following appointments in the Architectural Section of the Borough Engineer and Surveyor's Department:—

(*a*) ARCHITECTURAL ASSISTANT — Grades III, IV—(£960—£1,310 per annum).
(*b*) GENERAL ARCHITECTURAL ASSISTANT —Grade II—(£815—£960 per annum).
(*c*) JUNIOR ARCHITECTURAL ASSISTANT—Grade A.P.T. I—(£645—£815 per annum).

Applicants for appointment (*a*) must be Corporate Members of the R.I.B.A. and for (*b*) must have passed the Intermediate Examination of the R.I.B.A., whilst for appointment (*c*) details of training and experience should be stated.

A house on service tenancy may be rented by the successful applicant for appointment (*a*) and it is the Corporation's wish that the persons appointed shall live within the Borough.

Applications stating age, marital state, training, past and present appointments with salary, and experience, together with the names of three referees should be sent to the Borough Engineer and Surveyor, Carr Bank, Mansfield, Notts., to arrive not later than Monday, 29th May, 1961.

A. C. SHEPHERD,
Town Clerk.

Carr Bank,
Mansfield,
Notts. S7425

CITY OF SHEFFIELD
ESTATES SURVEYOR'S DEPARTMENT

Applications are invited from:—

1. Surveyors with experience.
2. Newly-qualified Surveyors.
3. Students who expect to qualify this year.
4. Young men who wish to train as Surveyors.

The Department, under the direction of Mr. W. H. Rothwell, B.Sc., F.R.I.C.S., offers a particularly wide field of experience including valuation and acquisition of properties for Housing and Education, Central Redevelopment and road improvement purposes, disposals of land and buildings by short and long leases; improvement, repair and demolition of properties acquired by the Local Authority for its various statutory purposes, rating valuation, agricultural estate management and advice on questions of stability arising out of underground mineral working.

Salaries for trainees range from £355 per annum at age 17 to £555 per annum at 21. Financial assistance is provided for tuition and examination fees. Salaries for qualified surveyors range from £960 per annum on qualification to £1,310 per annum according to experience, with good prospects of promotion to senior grades.

Apply in writing to the Town Clerk, Town Hall, Sheffield, 1. S7284

AIR MINISTRY requires QUANTITY SURVEYING ASSISTANTS, Grade III, at R.A.F. and Ministry of Aviation stations throughout the United Kingdom. The work includes abstracting and billing, site measurement and preparation of estimates.

Salary, which is dependent upon age, qualifications and experience, ranges from £726 (age 23) to £961 maximum in Grade III. There are pension prospects and also opportunities of advancement to numerous posts in the higher grades, viz.,

Technical Grade II:	£961—£1,098	123 posts
Technical Grade I:	£1,098—£1,348	42 posts
Technical Grade B:	£1,348—£1,552	6 posts
Technical Grade A:	£1,439—£1,697	6 posts

Vacancies occurring in the higher grades are, as a rule, filled by promotion of existing staff.

Overseas tours for which special allowances ranging at present up to £1,800 p.a. are payable in addition to a higher salary. Financial assistance and time off allowed for recognised courses of study leading to higher qualifications. Five-day week with 18 days paid leave a year initially.

Applicants who must be natural born British subjects, must hold O.N.C. (Building or Builders Quantities) or equivalent and have had good experience under Quantity Surveyor or Building Contractor. Knowledge of W.D. Schedule an advantage. Forms from Manager (P.E.2), Ministry of Labour, Professional and Executive Register, Atlantic House, Farringdon Street, London, E.C.4. Candidates selected will be interviewed in Air Ministry, London, and certain expenses reimbursed. Only applicants selected for interview will be advised. S7028

COUNTY BOROUGH OF WEST HARTLEPOOL
BOROUGH ARCHITECT'S DEPARTMENT

Applications are invited for the following appointments:—

One ASSISTANT ARCHITECT, salary A.P.T. III (£960-£1,140).

One ASSISTANT QUANTITY SURVEYOR, salary A.P.T. III (£960-£1,140).

Two CLERKS OF WORKS, salary: Miscellaneous 6 (£760-£825).

National Scheme of Conditions of Service and the Local Government Superannuation Acts apply and medical examination is required.

The Department has a programme including College of Further Education, Secondary and Primary Schools, Housing and Welfare Schemes.

Applications stating age and details of experience, together with the names of two referees, should be addressed to the Borough Architect, Municipal Buildings, West Hartlepool, and received by him not later than Friday 9th June, 1961.

ERIC J. WAGGOTT,
Town Clerk.

Municipal Buildings,
West Hartlepool.
11th May, 1961. 7619

COUNTY BOROUGH OF NORTHAMPTON

Applications are invited for the following appointments:

(1) TEMPORARY SENIOR ASSISTANT ARCHITECT, LETTERED GRADE "C" (£1,560—£1,825) for the building of new Municipal Offices and Shops adjoining the Guildhall, for a period of about three years.

(2) SENIOR ASSISTANT ARCHITECT, A.P.T.V (£1,310—£1,480) required in the first instance for new Municipal Offices.

(3) SENIOR ASSISTANT ARCHITECT, A.P.T. IV/V (£1,140—£1,480) for Education & General Section.

(4) TEMPORARY TOWN PLANNING ASSISTANT, A.P.T.IV/V (£1,140—£1,480) for review of the Development Plan.

(5) MAINTENANCE SURVEYOR, A.P.T.III (£960—£1,140).

Full particulars and application form, returnable by 5th June, from Borough Architect & Town Planning Officer, Guildhall, Northampton.

C. E. VIVIAN ROWE, *Town Clerk.*

S7627

HUNTINGDONSHIRE
COUNTY ARCHITECT'S DEPARTMENT

Applications are invited for the following appointments:—

(*a*) ARCHITECTURAL ASSISTANT, Grade A.P.T.4 (£1,140—£1,310).
Applicants must hold the A.R.I.B.A. qualification.

(*b*) ARCHITECTURAL ASSISTANT, Grade A.P.T.2 (£815—£960).

Application forms may be obtained from the County Architect, County Buildings, Huntingdon, and completed forms should be returned to the undersigned by Monday, 5th June, 1961.

A. C. AYLWARD,
Clerk of the County Council.

County Buildings,
Huntingdon. S7625

ASSISTANT ARCHITECT required by HAYES & HARLINGTON U.D.C. Salary within grade APT.IV, *i.e.*, £1,140—£1,310 p.a. plus appropriate London 'Weighting.' Preference given to finalists of the RIBA. Successful candidate must be capable of preparing sketch designs, full working drawings, specifications, supervision of building contracts, etc. Housing accommodation provided if necessary. Five day week. Further particulars and conditions of service and form of application obtainable from the undersigned, which when completed must be returned by 5th June, 1961.

GEORGE HOOPER,
Clerk and Solicitor.

Town Hall,
Hayes, Middlesex. S7615

BRISTOL COLLEGE OF SCIENCE AND TECHNOLOGY
Ashley Down, Bristol, 7
DEPARTMENT OF ARCHITECTURE
Head of Department:
K. H. PANTER, A.R.I.B.A., A.R.W.A., F.R.S.A.

The Governors invite applications for the following new posts in this developing department:

LECTURER in Building Sciences and Materials. Applicants should possess good architectural qualifications or be otherwise well qualified to take responsibility for this section of work. Previous experience of research or project work desirable.

ASSISTANT LECTURER in History of Architecture. Applicants should be well qualified to take responsibility for the teaching and development of studies in History of Architecture, and associated subjects. Assistance with general Studio work of the first two years will be required. There will be facilities for research work.

Staff are expected to co-operate in the teaching, analysis and criticism of all aspects of design from basic principles.

Salary: Lecturer: within range £1,370—£1,550
Assistant Lecturer: within range £790—£1,435
(Scales at present under review).

Details and application forms from the Registrar. Please quote ref. CST 61/16. 7623

URBAN DISTRICT OF EBBW VALE
ARCHITECT'S DEPARTMENT

ARCHITECTURAL ASSISTANTS (2). Grades III-IV (£960-£1,310).

Applications are invited for the above appointments (two) in the Architect's Department of the Council.

Applicants should be at least Intermediate R.I.B.A. Standard and for Grade IV should be corporate members of the R.I.B.A. Commencing salaries within the grades according to qualifications and experience.

The Department is engaged on an interesting programme of work including new Civic Centre Buildings which involves the construction of an Indoor Swimming Pool (just commencing), Municipal Offices, Council Chamber and Public Hall. In addition there are redevelopment and general housing schemes in course of preparation.

Alternate Saturday mornings free. Canteen facilities. Local Government Superannuation Acts apply.

Applications with usual information and names of two referees to be received by the undersigned not later than Wednesday the 7th June, 1961.

HOWARD J. WILLIAMS,
Clerk of the Council.

District Council Offices,
The Walk,
Ebbw Vale, Mon. S7614

LEEDS REGIONAL HOSPITAL BOARD
PROPOSED NEW GENERAL HOSPITAL AT HUDDERSFIELD
CLERK OF WORKS (BUILDING AND STRUCTURAL)

Applications are invited for the appointment of Clerk of Works (Building and Structural), in connection with the construction of a new General Hospital at Huddersfield (500 beds: approximate total cost £3,500,000). Salary £1,200 per annum (under certain conditions this figure may be increased to provide a maximum of £1,350 p.a.).

The project is being carried out in consecutive phases under the direction of the Regional Architect, P. B. Nash, A.R.I.B.A., and Messrs. George Trew and Dunn, Private Architects. The main building contract has now been running for one year and building on the site will continue for another three years.

The Clerk of Works will have an Assistant Clerk of Works (Building) and a Clerk of Works (Mechanical and Electrical) to assist him in his duties.

Applicants must possess a thorough knowledge of all aspects of the building trade and must have had extensive experience as Clerks of Works on multi-storey reinforced concrete framed buildings. Membership of the Institute of Clerks of Works or the possession of the Clerk of Works Diploma of the Association of Building Technicians an advantage.

Applications, stating age, qualifications, previous experience, together with the names of two Architects to whom reference may be made, to the Secretary, Park Parade, Harrogate, by 31st May, 1961. 7624

METROPOLITAN BOROUGH OF POPLAR
ASSISTANT ARCHITECTS (full time or part-time) required by Poplar Borough Council for immediate appointment. Salary scale A.P.T. III/IV (£960—£1,140 p.a.; £1,140—£1,310 p.a. plus £45 p.a. "weighting"). Commencing salary according to qualifications and experience. Projects include multi-storey flats and maisonnettes, etc., in redevelopment areas, and municipal buildings. Application forms from Borough Engineer and Surveyor, Poplar Town Hall, Bow Road, E.3. S7427

CITY OF NOTTINGHAM
ESTATES & HOUSING COMMITTEE

Applications are invited for the following appointments in the Chief Architect's Section of the Estates Department:—

(*a*) ASSISTANT ARCHITECT, A.P.T. Grade IV, £1,140—£1,310.

(*b*) ASSISTANT ARCHITECTS, A.P.T. Grade III, £960—£1,140.

(*c*) ARCHITECTURAL ASSISTANT, A.P.T. Grade II, £815—£960.

(*d*) ARCHITECTURAL ASSISTANT, A.P.T. Grade I, £645—£815.

Applicants for (*a*) should preferably be Associates of the Royal Institute of British Architects, or if not so qualified, have had appropriate professional experience, and for (*b*) should preferably have passed parts 1 and 2 of the R.I.B.A. Final Examination. Applicants for (*c*) and (*d*) should have passed the Intermediate Examination of the R.I.B.A.

Commencing salary in each case will be in accordance with qualifications and experience.

There is a large and interesting programme of comprehensive estate development and redevelopment schemes, including multi-storey dwellings, shopping centres, and all ancillary buildings.

The architects and assistants appointed will work in small self-contained teams under the general direction of a Group Leader and will be responsible for the design, construction and management of projects.

The appointments will be subject to the National Joint Council's Scheme of Conditions of Service.

Applications, stating age, qualifications, experience, present appointment and salary, and naming two referees, should be sent to the Estates Surveyor & Valuer, The Guildhall, Nottingham, by Tuesday, 30th May, 1961.

T. J. OWEN,
Town Clerk.

The Guildhall,
Nottingham. S7385

CITY OF CANTERBURY
SENIOR ASSISTANT ARCHITECTS

Salary range up to £1,480 (max. A.P.T. V)

Applications are invited for above appointments in City Architect and Planning Officer's Department. Commencing salary according to ability and experience.

Applicants should be qualified and be capable of supervising contracts from commencement to completion, and of co-ordinating the work of all sub-contractors.

The programme of work is varied and interesting, and offers considerable scope for initiative and experience. The successful candidates will be engaged on one of the following:

Housing
General Works
Public Buildings
Education.

Housing accommodation available if necessary. Applications, with the names of two referees, to the City Architect and Planning Officer, Municipal Buildings, Canterbury, by Friday, 26th May, 1961. Canvassing will disqualify.

J. BOYLE,
Town Clerk.
S7405

BOROUGH OF RUGBY
APPOINTMENT OF ASSISTANT ARCHITECT

Applications are invited for the above appointment in the Borough Engineer and Surveyor's Department, which has an interesting and varied programme of work.

The commencing salary will depend on qualifications and experience and will be within A.P.T. Grade IV (£1,140—£1,310). Housing accommodation will be provided if required and a car allowance on the essential user scale will be paid.

Further particulars and form of application may be obtained from the Borough Engineer and Surveyor, Burford House, Church Walk, Rugby, to whom completed applications must be sent not later than 20th May, 1961.

T. L. DUFFY,
Town Clerk.
7378

ADMINISTRATIVE COUNTY OF LEICESTER

(*a*) PRINCIPAL ASSISTANT ARCHITECT, £1,410—£1,565.

(*b*) CHIEF ASSISTANT ARCHITECTS, £1,310—£1,410—£1,566.

(*c*) SENIOR ASSISTANT ARCHITECTS, £1,140—£1,310.

(*d*) ARCHITECTURAL ASSISTANT, £815—£1,140 (according to qualifications).

Candidates for (*a*) must be members of the R.I.B.A., have had sound experience and be capable of acting as Group Leaders on an extensive programme of education buildings. Candidates for (*b*) must be members of the R.I.B.A., have had considerable office experience and be capable of taking charge of contracts from inception to completion. For (*c*), should be members of the R.I.B.A., have had office experience and be capable of taking charge of small contracts. For (*d*), should have Intermediate or Final qualifications of the R.I.B.A. and be capable of executing working drawings. Lodging allowance and removal expenses may be paid to a married man. Apply on form obtainable from County Architect, 123 London Road, Leicester. TC7478

BOROUGH OF HARROW

Applications are invited for appointments on the Architectural Staff of the Borough Engineer's Department which is engaged on a varied programme of municipal building schemes, including minor works to schools and is also responsible for all building maintenance.

(*a*) DEPUTY CHIEF ASSISTANT ARCHITECT, J.N.C. 'B' (£1,417—£1,670 p.a.).
Must be fully qualified and experienced in the organisation and direction of such works.

(*b*) PRINCIPAL ARCHITECTURAL ASSISTANT, A.P.T. V (£1,310—£1,480 p.a. plus London "Weighting").
Must be fully qualified and experienced to act as a group leader in the design and execution of new building works.

(*c*) SENIOR TECHNICAL ASSISTANT, A.P.T. IV (£1,140—£1,310 p.a. plus London "Weighting").
Must be suitably qualified and will assist in school maintenance works.

(*d*) ARCHITECTURAL ASSISTANT, A.P.T. III/IV* (£960—£1,310 p.a. plus London "Weighting").

* Note: Commencing salaries will be in accordance with qualifications and experience, but in the case of appointment (*d*), applicants will not proceed beyond the maximum of A.P.T. III until fully qualified.

The Council may be able to help with housing accommodation in the light of the applicant's circumstances. A contribution towards removal expenses will be considered.

The appointments are subject to the Local Government Superannuation Acts and to the appropriate National Schemes of Conditions of Service.

Forms of application may be obtained from me and must be returned not later than Friday, 26th May, 1961.

DAVID PRITCHARD,
Town Clerk.

Town Clerk's Office,
Harrow Weald Lodge,
Harrow. S7477

SURREY COUNTY COUNCIL

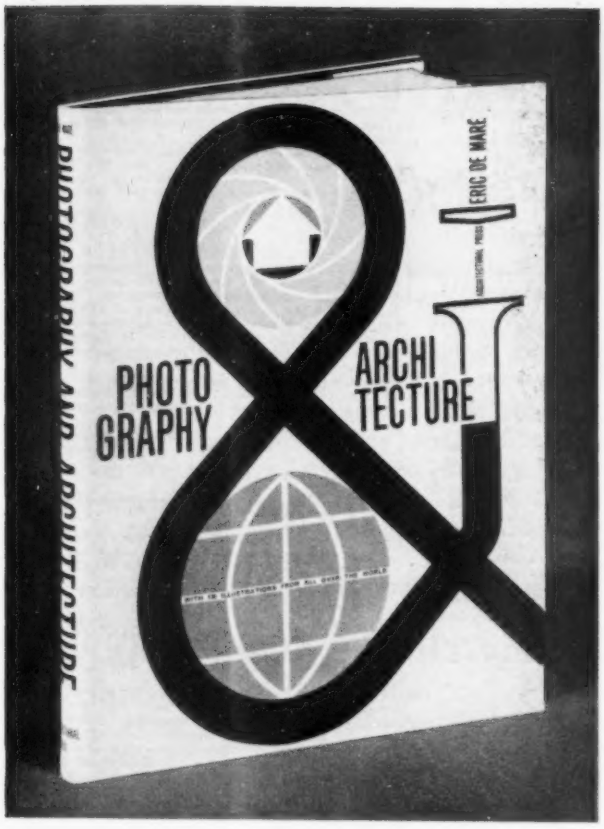
Applications invited for following appointments:—

1. Salary range £960—£1,310 p.a. plus £45 p.a. London Allowance. Successful candidates will be paid according to age and experience and will receive approved removal expenses. Applicants should state salary they expect to receive.
ARCHITECTS. Must be A.R.I.B.A. and have had experience in preparation of drawings and specifications, and be capable of assuming responsibility for medium to large scale contracts.

2. GRADE II. (£815—£960 p.a. plus up to £40 p.a. London Allowance).
ARCHITECTURAL ASSISTANTS. Must be of good general training preference given those who have passed Inter. R.I.B.A.

Candidates will be appointed at the appropriate point within the scale according to age and ability

Full details, present salary and three copy testimonials, preferably one from present employer, to County Architect, County Hall, Kingston, as soon as possible. S7569



ERIC de MARÉ

Photography & Architecture

THIS BOOK IS by an architect who has become a professional writer and photographer. It reveals simply the technical tricks of the trade and shows how people, using their cameras, may learn to understand, love and enjoy architecture in a direct way without having to carry a burden of passionless academicism.

The book is for the amateur who wants to know more about a fascinating branch of photography; for the architect who wants to learn to make records for use or fine pictures for pleasure; for anyone who likes to possess a book of beautiful photographs from all over the world.

The pictures have been selected and arranged not merely as first-class records of buildings, made by the world's masters of photography, but as photographs striking in themselves, which reveal the visual kinship between photography and architecture, by expressing the sensually pleasing elements of texture contrast, rhythm, space relationship, scale, and monumentality—especially through the selected close shot. Here are townscape, wallscape, floorscape, reflections, the contributions of rain and snow, the drama of perspective and depth of field, light in all its strange and evocative moods, the viewpoint of bird or worm, and the accidental beauties of squalor, decay or of the merely commonplace.

Size: 11 × 8½*in.* 208 *pages:* 109 *of photographs.*
50*s. net, postage* 1*s.* 9*d.*

The Architectural Press, 9-13 Queen Anne's Gate, S.W.1.

COSTAIN

Architect
Middle East Development

Richard Costain (Middle East) Ltd. have a vacancy for a qualified architect to work in their London office. This is a senior appointment for a man to take charge of the design of housing prospects, public buildings and industrial development in the Middle East and Mediterranean areas.

Candidates, preferably aged 30—40, should have had at least five years office experience since qualifying. Previous experience overseas advantageous. Salary range £1300—£1500 p.a.

Please write or telephone (WATerloo 4977) to

PERSONNEL MANAGER, RICHARD COSTAIN LTD.
111 WESTMINSTER BRIDGE ROAD, S.E.1

For further details write direct to the Chief Architect, telling him all about yourself: H. STANLEY SMITH, A.R.I.B.A.

Assistant
Architect

with experience in design and construction of offices, canteens and laboratories, is required by Imperial Chemical Industries Limited for its London Office.

Candidates, preferably aged between 25 and 35 should have intermediate or final qualifications and be able to carry out sketch designs and site supervision under the direction of qualified architects.

Salaries will be dependent on age and experience and there are Pension Fund and Profit Sharing schemes in operation. Assistance can be given towards house purchase and removal expenses for a married man.

Please apply in writing to :

Head Office Staff Department (SMW),
Imperial Chemical Industries Limited,
Imperial Chemical House,
London, S.W.1.

BURGH OF PAISLEY

Vacancies exist in my Department for suitably qualified Architects on the following scales:—

(*a*) ASSISTANT ARCHITECTS
Scale £850—£1,150.

(*b*) ARCHITECTURAL ASSISTANTS
Scale £730—£855.

Applicants for (*a*) must be A.R.I.B.A. and for (*b*) have reached the Intermediate Stage.

The appointments will be superannuable, and full details of age, experience and qualifications should reach me not later than Saturday, 20th May, 1961.

J. A. McGREGOR,
Burgh Engineer.

14, Gilmour Street,
PAISLEY.
28th April, 1961. S7479

COUNTY BOROUGH OF SOUTH SHIELDS
BOROUGH ENGINEER'S DEPARTMENT

Applications are invited for the appointment of SENIOR PRINCIPAL ASSISTANT QUANTITY SURVEYOR in accordance with J.N.C. Scale A up to £1,565 according to experience.

Applicants must have passed the Final Examination (Quantity Surveying Section) of the Royal Institution of Chartered Surveyors.

Housing accommodation will be made available to successful applicants if necessary and they will be required to pass a medical examination for Superannuation purposes.

Application forms are obtainable from the Borough Engineer, Town Hall, South Shields, and should be returned to him not later than 10 a.m., 5th June, 1961.

R. S. YOUNG,
Town Clerk.
S7485

METROPOLITAN BOROUGH OF CAMBERWELL
ARCHITECTS

Vacancies for Architects in the Borough Architect's Department within a salary range of £855 and £1,525 (Grades A.P.T. II to V of the National Scales). Grade and commencing salary according to qualifications and experience. The work of the department includes design and construction of public buildings, housing estates, including multi-storey construction. Application form from Town Clerk, Town Hall, S.E.5. Closing date 24th May, 1961. S7402

COUNTY BOROUGH OF WEST HAM

A vacancy exists for a GROUP ARCHITECT in the Borough Architect and Planning Officer's Department. J.N.C. Scale "B"—£1,485/£1,670 p.a., plus Essential Car Allowance.

There are also a number of vacancies for SENIOR ASSISTANT ARCHITECTS, J.N.C. Scale "A"—£1,400/£1,565 p.a., and for ARCHITECTURAL ASSISTANTS, A.P.T. Grade IV/V—£1,140/£1,480 p.a., plus London allowance.

An expanded programme of work, including numerous official buildings, Fire Stations, Primary and Secondary Schools, high density housing, and Town Centre Redevelopment Scheme, is on hand.

Applications, with details of qualifications and experience (together with names of two referees), to be addressed to the Borough Architect and Planning Officer, 70, West Ham Lane, Stratford, E.15, by 30th May, 1961. S7395

WESTERN REGION OF BRITISH RAILWAYS
require

ASSISTANT ARCHITECTS in the office of The Architect, Western Region, British Railways at Paddington Station.

Applicants must be Chartered Architects (A.R.I.B.A.) and have ability in architectural design, knowledge of modern building technique, and some experience of the control of a small staff. Salary range £1,070—£1,145 per annum.

Interesting work in pleasant conditions with promotion on MERIT.

Superannuation Fund.

Reduced rates of travel and other concessions.

Five-day week.

Applications, giving age, qualifications and experience, to:—

The Architect,
British Railways,
Western Region,
167, Westbourne Terrace,
Paddington,
London, W.2. 7494

CITY OF WORCESTER
APPOINTMENT OF ARCHITECTURAL STAFF

Applications are invited to fill vacancies in the Architectural Section of the City Engineer and Surveyor's Department.

Two SENIOR ASSISTANT ARCHITECTS, A.P.T. Grade IV (salary £1,140-£1,310).

Applicants must hold the A.R.I.B.A. qualification.

Three ARCHITECTURAL ASSISTANTS, A.P.T. Grades I/II (salary £645-£960).

The appointments are superannuable and subject to medical examination.

Housing accommodation will be offered, if necessary, and the Corporation are prepared to make a contribution towards removal expenses.

Casual Users' Car Allowance will be applicable.

Applications stating age, present and previous appointments and experience, together with the names of two referees, are to be sent to the City Engineer and Surveyor, 22, Bridge Street, Worcester, by 31st May.

BERTRAM WERSTER,
Town Clerk.

Guildhall,
Worcester. S7615

CUMBERNAULD DEVELOPMENT CORPORATION
MEASURING SURVEYOR (Ref. M.S.2)
Scale A.P.T. III (£960—£1,140 per annum)

Must have wide experience of remeasuring and recording measurements on major building contracts based on the Scottish Mode of Measurement.

The Chief Quantity Surveyor is a member of the R.I.C.S., and the office is recognised for examination purposes.

Housing provided if required. Five-day week.

Application forms, which should be returned completed NOT LATER THAN Wednesday, 7th June, 1961, may be obtained from the General Manager, Cumbernauld Development Corporation, Cumbernauld House, Cumbernauld, Glasgow. 7498

SCOTTISH SPECIAL HOUSING ASSOCIATION LTD.
ARCHITECTURAL DIVISION
APPOINTMENT OF ARCHITECTS

Applications are invited from qualified Architects for the following appointments on the permanent staff:—

Architects Grade I, Salary Scale £1,325—£1,575.
Architects Grade II, Salary Scale £895—£1,385.

The posts are superannuable under the Local Government Superannuation Acts, and placing will be related to experience.

The Association is a Government sponsored and financed body, providing houses and flats throughout Scotland as directed by the Secretary of State.

The Association has at present a large and interesting programme comprising a number of major housing projects, including central redevelopment in Glasgow and other towns, together with an important programme of work in connection with Glasgow's "Overspill." Designs for mixed development layouts, including multi-storey blocks of flats up to 26 storeys in height, are being prepared, and cost analysis techniques are being used in the preparation of drawings. The posts advertised offer considerable valuable experience and opportunities for persons interested in civic design, landscaping and three dimensional planning of urban developments.

The Headquarters of the Association are in Edinburgh where housing accommodation could be provided if required.

Application forms with full details of the appointments from Harold E. Buteux, A.R.I.B.A., A.M.T.P.I., A.R.I.A.S., Chief Technical Officer, Scottish Special Housing Association Ltd., 15/21 Palmerston Place, Edinburgh, 12. S7497

CORPORATION OF LONDON

The following posts in the Building and Architectural section of the City Surveyor's Office are vacant.

A. ARCHITECTURAL OR SURVEYING ASSISTANT. Candidates must have passed at least Intermediate R.I.B.A. or R.I.C.S., possess a sound knowledge of building construction and the ability to prepare detailed ¼th scale drawings. Salary range £990—£1,195.

B. JUNIOR ARCHITECTURAL OR SURVEYING ASSISTANT. Applicants should be studying for Intermediate examination R.I.B.A. or R.I.C.S. and should possess a sound knowledge of building construction. Salary scale £630—£990.

Write, giving age and full details of previous experience with names of two referees, within seven days, to The City Surveyor, Guildhall, E.C.2. 7500

CORPORATION OF KIRKCALDY

There are the undernoted vacancies:—

BURGH ENGINEER'S DEPARTMENT

(*a*) ASSISTANT ARCHITECT/PLANNER. Must be associate member of the R.I.B.A., qualified or experienced in Town Planning, able to prepare neighbourhood and site layouts including central area redevelopment. Salary scale £875 × £50 to £1,325, with placing according to age and experience.

(*b*) ASSISTANT ARCHITECT. Must be A.R.I.B.A., with ability to supervise and control large scale contracts. Salary scale £875 × £50 to £1,325, with placing according to age and experience.

Housing accommodation available. Posts pensionable; medical examination. Canvassing direct or indirect disqualifies. Declare relationship to member of Council or chief official. Applications, stating age, details of training, qualifications and experience, with names and addresses of two referees, to the Burgh Engineer and Planning Officer, Town House, Kirkcaldy, by 26th May, 1961. 7503

COUNTY BOROUGH OF BIRKENHEAD
BOROUGH ARCHITECT'S DEPARTMENT

Applications are invited for the following permanent positions:—

(*a*) CHIEF ASSISTANT ARCHITECT. SCALE "A" (£1,300—£1,565).

(*b*) PRINCIPAL ASSISTANTS A.P.T.V. (£1,310—£1,480).

(*c*) ASSISTANT ARCHITECTS. A.P.T. IV (£1,140—£1,310).

(*d*) ARCHITECTURAL ASSISTANTS A.P.T. III/IV (£960—£1,310).

Applicants for posts (*a*), (*b*) and (*c*) must be fully qualified and (*d*) suitably qualified. Salaries commensurate with qualifications and experience. Assistance given to provide Housing Accommodation by rental or mortgage. The Corporation's Building Programme affords many opportunities for a variety of interesting and important work and advancement in the profession. Application form from Borough Architect, 3, Conway Street, Birkenhead, to be returned by 30th May, 1961. Relationship to members or senior officers of the Council must be disclosed. 7558

LANCASHIRE COUNTY COUNCIL

ARCHITECTURAL ASSISTANTS required at Preston, A.P.T. Grade V, salary £1,310—£1,480 per annum.

Applicants must be qualified architects and have had experience in a planning office preferably on the preparation of Comprehensive Development Area schemes for central area redevelopment.

Disturbance allowances and removal expenses to a maximum of £125 may be granted in approved cases.

Applications giving age, qualifications, present appointment, experience, etc., and two referees to the County Planning Officer (S), East Cliff County Offices, Preston, by the 30th May, 1961. 7501

COUNTY BOROUGH OF DEWSBURY
APPOINTMENT OF BOROUGH ARCHITECT AND BUILDINGS SURVEYOR

Applications are invited from members of the Royal Institute of British Architects for the appointment of Borough Architect and Buildings Surveyor at the commencing salary of £2,025 rising by annual increments of £75 to £2,325, with a car allowance of £112 6s. per annum. Housing accommodation will be made available for the successful applicant, if required.

Further particulars and conditions of appointment can be obtained from the undersigned, by whom applications must be received not later than the 27th May, 1961.

A. NORMAN JAMES,
Town Clerk.

Town Hall,
Dewsbury.
6th May, 1961. 7504

CITY OF BIRMINGHAM PUBLIC WORKS DEPARTMENT
PLANNING AND REDEVELOPMENT SECTION

Applications are invited for the following posts:

(*a*) CHIEF ASSISTANT (RESEARCH), Grade A.P.T. V (£1,310—£1,480 p.a.).

(*b*) SENIOR PLANNING ASSISTANT, Grade A.P.T. IV (£1,140—£1,310 p.a.).

Applicants for post (*a*) should be Graduates of a British University and preferably Chartered Town Planners. Applicants for post (*b*) should be corporate Members of the Town Planning Institute.

The Chief Assistant will be in charge of a Research Group and should have had some previous experience in the Research Office of a planning authority. The Senior Planning Assistant will be employed in the design office and should have had experience in the preparation of designs in Redevelopment Areas. Experience in landscaping will be of assistance.

The posts are permanent, superannuable, and subject to a medical examination.

Applications endorsed with the heading of the post applied for, stating qualifications, age and experience, together with the names of two persons to whom reference may be made, should reach the undersigned by the 3rd June, 1961.

Canvassing disqualifies.

HERBERT J. MANZONI,
City Engineer and Surveyor.

Baskerville House,
Civic Centre,
Birmingham, 1. 7506

BOROUGH OF LEYTON
(in the County of Essex)
APPOINTMENT OF
JUNIOR ARCHITECTURAL ASSISTANT

Applications are invited for the appointment of Junior Architectural Assistant Grade A.P.T. I, £645—£815 per annum plus London weighting. The successful applicant will be employed by the Essex County Council and will work in the School Architect's Section of the Borough Engineer & Surveyor's Department, Town Hall, Leyton, E.10. Five-day week is operated.

Details and form of application from the Borough Education Officer, Education Offices, Kirkdale Road, Leytonstone, E.11, to whom they should be returned within 14 days from the appearance of this advertisement. 7514

BOROUGH OF LEYTON
(in the County of Essex)
COMMITTEE FOR EDUCATION
APPOINTMENT OF
ARCHITECTURAL ASSISTANT

Applications are invited for the permanent appointment of Architectural Assistant, Grade A.P.T. III, £960—£1,140 per annum, plus London weighting. The successful applicant will be employed by the Essex County Council and will work in the School Architect's Section of the Borough Engineer and Surveyor's Department, Town Hall, Leyton, E.10, five-day week is operated.

Details and forms of application from the Borough Education Officer, Education Offices, Kirkdale Road, Leytonstone, E.11, to whom they should be returned within 14 days from the appearance of this advertisement. 7515

COUNTY BOROUGH OF IPSWICH
APPOINTMENT OF
ARCHITECTURAL ASSISTANT
Grades A.P.T. III-IV (£1,140—£1,310 per annum)

Applications are invited from suitably qualified Architects for the above appointment. The commencing salary will be dependent upon qualifications and experience. Applications giving the usual particulars together with the names of two referees must be received by the Borough Engineer and Surveyor not later than Monday, 5th June, 1961. Canvassing disqualifies.

J. C. NELSON,
Town Clerk.

Town Hall,
Ipswich. 7563

ARCHITECTURE

and FOOD!

With its continuing expansion and the new developments taking place in food technology, the food industry offers both unusual interest and potential to the architectural profession.

Foremost in the industry is Heinz with headquarters in North-West London where an extensive new building and modernisation programme is currently in hand. Development is also taking place in two factories in the North.

The following staff are currently required:

QUALIFIED ARCHITECT

Applications are invited from architects over 30 years of age who have previous industrial experience.

The successful candidate will be required to lead a small team responsible for the development and design of a number of interesting projects at our various factories.

The appointment is a permanent one carrying an attractive salary.

ARCHITECTURAL DRAUGHTSMAN

Applications are invited from men of any age with industrial experience.

The successful candidate will become a key member of a small design team engaged on a varied building programme.

An attractive salary will be offered to the right man and young men wishing to qualify will be given every opportunity to do so.

Conditions of employment are excellent and include a non-contributory pension and free life assurance.

Please address applications, which should give a brief summary of personal history to data, to:

THE PERSONNEL OFFICER
H. J. HEINZ COMPANY LIMITED
WAXLOW ROAD, HARLESDEN
LONDON, N.W.10

Architects

required for the following posts:—

ASSISTANT ARCHITECTS

Salary range:
£1,140 p.a. — £1,320 p.a.

Applicants must be fully qualified and capable of supervising staff.
(Reference 139/A/).

ARCHITECTURAL ASSISTANTS

Salary ranges:
£1,060 p.a. — £1,140 p.a.
£940 p.a. — £1,020 p.a.

Applicants should be qualified to R.I.B.A. Intermediate standard with previous office experience.
(Reference 139/B/3).

Valuable free travel; 5 day week; contributory superannuation after probation

Applications quoting reference number of post applied for and stating age, qualifications and full details of experience to Staff and Welfare Officer,
LONDON TRANSPORT, 55 Broadway, S.W.1

THE ARCHITECT'S DEPARTMENT
of a well-known Building and Civil Engineering Contractors, with offices near Hyde Park, London, requires ADDITIONAL STAFF, for work on COMMERCIAL & RESIDENTIAL PROJECTS

Vacancies exist for qualified

ARCHITECTS

and also for

ASSISTANTS

with R.I.B.A. Inter. or equivalent experience.

Salary range from £800 to £1300 p.a.

Please write to *Box No. c/o paper* with brief details of age, experience and qualifications. All communications will be acknowledged and treated as confidential.

Replies to : The Chief Architect,
Token Construction Co. Ltd.,
37, Park Street, W.1.

BURGH OF PAISLEY

Vacancies exist in my Department for suitably qualified Architects on the following scales:—

(*a*) ASSISTANT ARCHITECTS
Scale £850—£1,150.

(*b*) ARCHITECTURAL ASSISTANTS
Scale £730—£855.

Applicants for (*a*) must be A.R.I.B.A. and for (*b*) have reached the Intermediate Stage.

The appointments will be superannuable, and full details of age, experience and qualifications should reach me not later than Saturday, 20th May, 1961.

J. A. McGREGOR,
Burgh Engineer.

14, Gilmour Street,
PAISLEY.
28th April, 1961. S7479

COUNTY BOROUGH OF SOUTH SHIELDS
BOROUGH ENGINEER'S DEPARTMENT

Applications are invited for the appointment of SENIOR PRINCIPAL ASSISTANT QUANTITY SURVEYOR in accordance with J.N.C. Scale A up to £1,565 according to experience.

Applicants must have passed the Final Examination (Quantity Surveying Section) of the Royal Institution of Chartered Surveyors.

Housing accommodation will be made available to successful applicants if necessary and they will be required to pass a medical examination for Superannuation purposes.

Application forms are obtainable from the Borough Engineer, Town Hall, South Shields, and should be returned to him not later than 10 a.m., 5th June, 1961.

R. S. YOUNG,
Town Clerk.
S7485

METROPOLITAN BOROUGH OF CAMBERWELL
ARCHITECTS

Vacancies for Architects in the Borough Architect's Department within a salary range of £855 and £1,525 (Grades A.P.T. II to V of the National Scales). Grade and commencing salary according to qualifications and experience. The work of the department includes design and construction of public buildings, housing estates, including multi-storey construction. Application form from Town Clerk, Town Hall, S.E.5. Closing date 24th May, 1961. S7402

COUNTY BOROUGH OF WEST HAM

A vacancy exists for a GROUP ARCHITECT in the Borough Architect and Planning Officer's Department, J.N.C. Scale "B"—£1,485/£1,670 p.a., plus Essential Car Allowance.

There are also a number of vacancies for SENIOR ASSISTANT ARCHITECTS, J.N.C. Scale "A"—£1,400/£1,565 p.a., and for ARCHITECTURAL ASSISTANTS, A.P.T. Grade IV/V—£1,140/£1,480 p.a., plus London allowance.

An expanded programme of work, including numerous official buildings, Fire Stations, Primary and Secondary Schools, high density housing, and Town Centre Redevelopment Scheme, is on hand.

Applications, with details of qualifications and experience (together with names of two referees), to be addressed to the Borough Architect and Planning Officer, 70, West Ham Lane, Stratford, E.15, by 30th May, 1961. S7395

WESTERN REGION OF BRITISH RAILWAYS
require

ASSISTANT ARCHITECTS in the office of The Architect, Western Region, British Railways at Paddington Station.

Applicants must be Chartered Architects (A.R.I.B.A.) and have ability in architectural design, knowledge of modern building technique, and some experience of the control of a small staff. Salary range £1,070—£1,145 per annum.

Interesting work in pleasant conditions with promotion on MERIT.

Superannuation Fund.

Reduced rates of travel and other concessions.

Five-day week.

Applications, giving age, qualifications and experience, to:—

The Architect,
British Railways,
Western Region,
167, Westbourne Terrace,
Paddington,
London, W.2. 7494

CITY OF WORCESTER
APPOINTMENT OF ARCHITECTURAL STAFF

Applications are invited to fill vacancies in the Architectural Section of the City Engineer and Surveyor's Department.

Two SENIOR ASSISTANT ARCHITECTS, A.P.T. Grade IV (salary £1,140-£1,310).

Applicants must hold the A.R.I.B.A. qualification.

Three ARCHITECTURAL ASSISTANTS, A.P.T. Grades I/II (salary £545-£960).

The appointments are superannuable and subject to medical examination.

Housing accommodation will be offered, if necessary, and the Corporation are prepared to make a contribution towards removal expenses.

Casual Users' Car Allowance will be applicable.

Applications stating age, present and previous appointments and experience, together with the names of two referees, are to be sent to the City Engineer and Surveyor, 22, Bridge Street, Worcester, by 31st May.

BERTRAM WEBSTER,
Town Clerk.

Guildhall,
Worcester. S7615

CUMBERNAULD DEVELOPMENT CORPORATION
MEASURING SURVEYOR (Ref. M.S.2)
Scale A.P.T. III (£960—£1,140 per annum)

Must have wide experience of remeasuring and recording measurements on major building contracts based on the Scottish Mode of Measurement.

The Chief Quantity Surveyor is a member of the R.I.C.S., and the office is recognised for examination purposes.

Housing provided if required. Five-day week.

Application forms, which should be returned completed NOT LATER THAN Wednesday, 7th June, 1961, may be obtained from the General Manager, Cumbernauld Development Corporation, Cumbernauld House, Cumbernauld, Glasgow. 7498

SCOTTISH SPECIAL HOUSING ASSOCIATION LTD.
ARCHITECTURAL DIVISION
APPOINTMENT OF ARCHITECTS

Applications are invited from qualified Architects for the following appointments on the permanent staff:—

Architects Grade I, Salary Scale £1,325—£1,575.
Architects Grade II, Salary Scale £895—£1,385.

The posts are superannuable under the Local Government Superannuation Acts, and placing will be related to experience.

The Association is a Government sponsored and financed body, providing houses and flats throughout Scotland as directed by the Secretary of State.

The Association has at present a large and interesting programme comprising a number of major housing projects, including central redevelopment in Glasgow and other towns, together with an important programme of work in connection with Glasgow's "Overspill." Designs for mixed development layouts, including multi-storey blocks of flats up to 26 storeys in height, are being prepared, and cost analysis techniques are being used in the preparation of drawings. The posts advertised offer considerable valuable experience and opportunities for persons interested in civic design, landscaping and three dimensional planning of urban developments.

The Headquarters of the Association are in Edinburgh where housing accommodation could be provided if required.

Application forms with full details of the appointments from Harold E. Buteux, A.R.I.B.A., A.M.T.P.I., A.R.I.A.S., Chief Technical Officer, Scottish Special Housing Association Ltd., 15/21 Palmerston Place, Edinburgh, 12. S7497

CORPORATION OF LONDON

The following posts in the Building and Architectural section of the City Surveyor's Office are vacant.

A. ARCHITECTURAL OR SURVEYING ASSISTANT. Candidates must have passed at least Intermediate R.I.B.A. or R.I.C.S., possess a sound knowledge of building construction and the ability to prepare detailed $\frac{1}{8}$th scale drawings. Salary range £990—£1,195.

B. JUNIOR ARCHITECTURAL OR SURVEYING ASSISTANT. Applicants should be studying for Intermediate examination R.I.B.A. or R.I.C.S. and should possess a sound knowledge of building construction. Salary scale £630—£990.

Write, giving age and full details of previous experience with names of two referees, within seven days, to The City Surveyor, Guildhall, E.C.2. 7500

CORPORATION OF KIRKCALDY

There are the undernoted vacancies:—

BURGH ENGINEER'S DEPARTMENT.

(*a*) ASSISTANT ARCHITECT/PLANNER. Must be associate member of the R.I.B.A., qualified or experienced in Town Planning, able to prepare neighbourhood and site layouts including central area redevelopment. Salary scale £875 × £50 to £1,325, with placing according to age and experience.

(*b*) ASSISTANT ARCHITECT. Must be A.R.I.B.A., with ability to supervise and control large scale contracts. Salary scale £875 × £50 to £1,325, with placing according to age and experience.

Housing accommodation available. Posts pensionable; medical examination. Canvassing direct or indirect disqualifies. Declare relationship to member of Council or chief official. Applications, stating age, details of training, qualifications and experience, with names and addresses of two referees, to the Burgh Engineer and Planning Officer, Town House, Kirkcaldy, by 26th May, 1961. 7503

COUNTY BOROUGH OF BIRKENHEAD
BOROUGH ARCHITECT'S DEPARTMENT

Applications are invited for the following permanent positions:—

(*a*) CHIEF ASSISTANT ARCHITECT, SCALE "A" (£1,300—£1,565).

(*b*) PRINCIPAL ASSISTANTS A.P.T.V. (£1,310—£1,480).

(*c*) ASSISTANT ARCHITECTS, A.P.T. IV (£1,140—£1,310).

(*d*) ARCHITECTURAL ASSISTANTS A.P.T. III/IV (£960—£1,310).

Applicants for posts (*a*), (*b*) and (*c*) must be fully qualified and (*d*) suitably qualified. Salaries commensurate with qualifications and experience. Assistance given to provide Housing Accommodation by rental or mortgage. The Corporation's Building Programme affords many opportunities for a variety of interesting and important work and advancement in the profession. Application form from Borough Architect, 3, Conway Street, Birkenhead, to be returned by 30th May, 1961. Relationship to members or senior officers of the Council must be disclosed. 7558

LANCASHIRE COUNTY COUNCIL

ARCHITECTURAL ASSISTANTS required at Preston, A.P.T. Grade V, salary £1,319—£1,480 per annum.

Applicants must be qualified architects and have had experience in a planning office preferably on the preparation of Comprehensive Development Area schemes for central area redevelopment.

Disturbance allowances and removal expenses to a maximum of £125 may be granted in approved cases.

Applications giving age, qualifications, present appointment, experience, etc., and two referees to the County Planning Officer (S), East Cliff County Offices, Preston, by the 30th May, 1961. 7501

COUNTY BOROUGH OF DEWSBURY
APPOINTMENT OF BOROUGH ARCHITECT AND BUILDINGS SURVEYOR

Applications are invited from members of the Royal Institute of British Architects for the appointment of Borough Architect and Buildings Surveyor at the commencing salary of £2,025 rising by annual increments of £75 to £2,325, with a car allowance of £112 6s. per annum. Housing accommodation will be made available for the successful applicant, if required.

Further particulars and conditions of appointment can be obtained from the undersigned, by whom applications must be received not later than the 27th May, 1961.

A. NORMAN JAMES,
Town Clerk.

Town Hall,
Dewsbury.
6th May, 1961. 7504

CITY OF BIRMINGHAM PUBLIC WORKS DEPARTMENT
PLANNING AND REDEVELOPMENT SECTION

Applications are invited for the following posts:

(*a*) CHIEF ASSISTANT (RESEARCH), Grade A.P.T. V (£1,310—£1,480 p.a.).

(*b*) SENIOR PLANNING ASSISTANT, Grade A.P.T. IV (£1,140—£1,310 p.a.).

Applicants for post (*a*) should be Graduates of a British University and preferably Chartered Town Planners. Applicants for post (*b*) should be corporate Members of the Town Planning Institute.

The Chief Assistant will be in charge of a Research Group and should have had some previous experience in the Research Office of a planning authority. The Senior Planning Assistant will be employed in the design office and should have had experience in the preparation of designs in Redevelopment Areas. Experience in landscaping will be of assistance.

The posts are permanent, superannuable, and subject to a medical examination.

Applications endorsed with the heading of the post applied for, stating qualifications, age and experience, together with the names of two persons to whom reference may be made, should reach the undersigned by the 3rd June, 1961.

Canvassing disqualifies.

HERBERT J. MANZONI,
City Engineer and Surveyor.

Baskerville House,
Civic Centre,
Birmingham, 1. 7506

BOROUGH OF LEYTON
(in the County of Essex)
APPOINTMENT OF
JUNIOR ARCHITECTURAL ASSISTANT

Applications are invited for the appointment of Junior Architectural Assistant Grade A.P.T. I, £645—£815 per annum plus London weighting. The successful applicant will be employed by the Essex County Council and will work in the School Architect's Section of the Borough Engineer & Surveyor's Department, Town Hall, Leyton, E.10. Five-day week is operated.

Details and form of application from the Borough Education Officer, Education Offices, Kirkdale Road, Leytonstone, E.11, to whom they should be returned within 14 days from the appearance of this advertisement. 7514

BOROUGH OF LEYTON
(in the County of Essex)
COMMITTEE FOR EDUCATION
APPOINTMENT OF
ARCHITECTURAL ASSISTANT

Applications are invited for the permanent appointment of Architectural Assistant, Grade A.P.T. III, £960—£1,140 per annum, plus London weighting. The successful applicant will be employed by the Essex County Council and will work in the School Architect's Section of the Borough Engineer and Surveyor's Department, Town Hall, Leyton, E.10, five-day week is operated.

Details and forms of application from the Borough Education Officer, Education Offices, Kirkdale Road, Leytonstone, E.11, to whom they should be returned within 14 days from the appearance of this advertisement. 7515

COUNTY BOROUGH OF IPSWICH
APPOINTMENT OF
ARCHITECTURAL ASSISTANT

Grades A.P.T. III-IV (£1,140—£1,310 per annum)

Applications are invited from suitably qualified Architects for the above appointment. The commencing salary will be dependent upon qualifications and experience. Applications giving the usual particulars together with the names of two referees must be received by the Borough Engineer and Surveyor not later than Monday, 5th June, 1961. Canvassing disqualifies.

J. C. NELSON,
Town Clerk.

Town Hall,
Ipswich. 7563

ARCHITECTURE

and FOOD!

With its continuing expansion and the new developments taking place in food technology, the food industry offers both unusual interest and potential to the architectural profession.

Foremost in the industry is Heinz with headquarters in North-West London where an extensive new building and modernisation programme is currently in hand. Development is also taking place in two factories in the North.

The following staff are currently required:

QUALIFIED ARCHITECT

Applications are invited from architects over 30 years of age who have previous industrial experience.

The successful candidate will be required to lead a small team responsible for the development and design of a number of interesting projects at our various factories.

The appointment is a permanent one carrying an attractive salary.

ARCHITECTURAL DRAUGHTSMAN

Applications are invited from men of any age with industrial experience.

The successful candidate will become a key member of a small design team engaged on a varied building programme.

An attractive salary will be offered to the right man and young men wishing to qualify will be given every opportunity to do so.

Conditions of employment are excellent and include a non-contributory pension and free life assurance.

Please address applications, which should give a brief summary of personal history to data, to:

THE PERSONNEL OFFICER
H. J. HEINZ COMPANY LIMITED
WAXLOW ROAD, HARLESDEN
LONDON, N.W.10

Architects

required for the following posts:—

ASSISTANT ARCHITECTS

Salary range:
£1,140 p.a. — £1,320 p.a.

Applicants must be fully qualified and capable of supervising staff.
(Reference 139/A/).

ARCHITECTURAL ASSISTANTS

Salary ranges:
£1,060 p.a. — £1,140 p.a.
£940 p.a. — £1,020 p.a.

Applicants should be qualified to R.I.B.A. Intermediate standard with previous office experience.
(Reference 139/B/3).

Valuable free travel; 5 day week; contributory superannuation after probation

Applications quoting reference number of post applied for and stating age, qualifications and full details of experience to Staff and Welfare Officer,
LONDON TRANSPORT, 55 Broadway, S.W.1

THE ARCHITECT'S DEPARTMENT
of a well-known Building and Civil Engineering Contractors, with offices near Hyde Park, London, requires ADDITIONAL STAFF, for work on COMMERCIAL & RESIDENTIAL PROJECTS

Vacancies exist for qualified

ARCHITECTS

and also for

ASSISTANTS

with R.I.B.A. Inter. or equivalent experience.

Salary range from £800 to £1300 p.a.

Please write to *Box No. c/o paper* with brief details of age, experience and qualifications. All communications will be acknowledged and treated as confidential.

Replies to : The Chief Architect,
Token Construction Co. Ltd.,
37, Park Street, W.1.

SHROPSHIRE

ARCHITECTS are required in the COUNTY ARCHITECT'S DEPARTMENT to work on projects ranging from the design of the New Shirehall (£1,000,000) to new Schools, Welfare, Police and other public buildings. Salary Grades A.P.T. V (maximum £1,480) and A.P.T. IV (maximum £1,310). Qualified staff who feel they can make a contribution to one or more of these aspects of the Department's work are invited to apply for the necessary forms to Ralph Crowe, A.A.Dipl., A.R.I.B.A., A.M.T.P.I., County Architect, Column House, London Road, Shrewsbury, stating the post to be applied for. A disturbance allowance or weekly separation allowance will be paid to married men taking up the appointments.

Closing date for applications 6th June, 1961. S7555

CITY OF PORTSMOUTH
CITY ARCHITECT'S DEPARTMENT

Applications are invited for the appointment of an ARCHITECTURAL ASSISTANT at a salary in accordance with A.P.T. Grade I (£645—£815) or Grade II (£815—£960), according to experience.

Applicants must be Student Members of the R.I.B.A.

Applications, with full details, and names and addresses of two referees, must be delivered to the City Architect, 1 Western Parade, Portsmouth, not later than Monday, 5th June, 1961.

Canvassing will disqualify.

J. R. HASLEGRAVE,
Town Clerk.
7541

BOROUGH OF SCARBOROUGH
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT

Applications are invited for the post of ASSISTANT ARCHITECT at a salary on Grade A.P.T. IV (£1,140—£1,310).

Applicants should be Associates of the R.I.B.A.

The appointment is subject to the provisions of the Local Government Superannuation Acts, 1937-1953, and to the passing of a medical examination, and will be terminable by one month's notice on either side. Housing accommodation will be made available for successful applicant, if married, and the Council will pay one-half of the removal expenses incurred.

Applications, in envelopes endorsed Assistant Architect, stating age, present and previous appointments, training, qualifications and experience, together with the names of two referees, to be delivered to the undersigned not later than Saturday, 27th May, 1961.

V. FORSHAW,
Borough Engineer and Surveyor.
Town Hall,
Scarborough. S7496

CITY AND COUNTY OF NORWICH
CITY ARCHITECT'S DEPARTMENT
URBAN RENEWAL PROGRAMME

Applications are invited for the following permanent appointments:—

(*a*) QUALIFIED ASSISTANT ARCHITECT, Grade A.P.T. IV (£1,140—£1,310).

(*b*) ARCHITECTURAL ASSISTANT with Intermediate R.I.B.A. examination, Grade A.P.T. II (£815—£960).

The commencing salary is to be fixed in accordance with experience and the provision of housing accommodation will be considered. A casual car allowance is available for appointment (*a*).

Application forms, obtainable from David Percival, City Architect, City Hall, Norwich, NOR 01A, must be returned by 5 p.m. on Monday, 29th May, 1961. 7562

BRACKNELL DEVELOPMENT CORPORATION

Applications are invited for the following vacancies in the Chief Architect's Department:—

ARCHITECTURAL ASSISTANT, Salary range £645—£815.

JUNIOR ARCHITECTURAL ASSISTANT, Salary up to £630 (commencing salary according to qualifications and experience).

The posts offer the opportunity of working on progressive schemes in Housing, Industrial and Town Centre development. Housing can be made available in suitable circumstances and time allowed, in the junior post, for technical training. Superannuation schemes, medical examination, five-day week. Apply by Thursday, 1st June, giving age, education, experience and any appointments held (with dates and salaries) and the names of two referees, to General Manager (A), Bracknell Development Corporation, Farley Hall, Bracknell, Berks, stating clearly which post is applied for. S7565

EXETER CITY COUNCIL
CITY ARCHITECT'S DEPARTMENT

THREE SENIOR ASSISTANT ARCHITECTS required on the established staff to work on an interesting and varied programme of local authority works.

Salary within A.P.T. Grade IV (£1,140 to £1,310), entry point on the grade depending on experience. Provision of housing accommodation will be considered and removal expenses will be paid.

Applicants must be Associate members of the R.I.B.A. N.J.C. Conditions of Service. Successful candidates will be required to pass a medical examination.

Applications, stating age, experience and qualifications, should be received by the City Architect, Municipal Offices, Exeter, not later than 29th May, 1961. 7645

COUNTY BOROUGH OF IPSWICH
APPOINTMENT OF PLANNING ASSISTANT
Grades A.P.T. III-IV (£1,140—£1,310)

Applications are invited for the above post. Candidates must be Associate Members of the Town Planning Institute with experience in three-dimensional work related to central areas. Applications to be forwarded to the Borough Engineer & Surveyor, 19 Tower Street, Ipswich, giving the usual details and the names of two referees not later than 29th May, 1961. Canvassing disqualifies.

J. C. NELSON,
Town Clerk.
Town Hall,
Ipswich. 7564

LONDON COUNTY COUNCIL
ARCHITECT'S DEPARTMENT
VOLUNTARY SCHOOLS SECTION

ARCHITECTS, Grade III, £830—£1,250.
ARCHITECTURAL ASSISTANTS, £720—£960.
BUILDING SURVEYORS, £720—£960.

The work of this section consists of technical examination at all stages of all development proposals for 400 Church schools, Grammar schools and Polytechnics and the preparation of schemes and carrying out building works in connection with school meals accommodation, schoolkeepers' houses and buildings at playing fields. Architects and Architectural Assistants with some knowledge of school planning are required for this work.

The section is also responsible for maintenance works at these schools for which Building Surveyors with experience in maintenance works are required.

Starting salary for all appointments in accordance with qualifications and experience.

Form and particulars from Hubert Bennett, F.R.I.B.A., Architect to the Council (EK/A/1226/5), County Hall, S.E.1. S7525

ARCHITECTS AND MAINTENANCE SURVEYORS. Pensionable posts for men and women at least 25 and under 35 on 1st January, 1961 (extension for regular Forces service, Overseas Civil Service, established Civil Service and temporary Government service as Architect or Maintenance Surveyor). Candidates must be registered Architects or, alternatively, for Maintenance Surveyor posts, have achieved Corporate Membership of R.I.C.S. (Building Section), or have passed examinations necessary for attaining Corporate Membership. National salary £936—£1,258 according to age, rising to £1,430. Promotion prospects. Write Civil Service Commission, 17 North Audley Street, London, W.1, for application form quoting S/60-61. 7543



ADMINISTRATION OF THE COUNTY OF KENT

COUNTY ARCHITECT'S DEPARTMENT

Re-organisation of technical groups in this office affords opportunities for the following:—

Group Working

Modern Offices

Large and Varied Programmes

Architects	£960 to £1,140 £1,140 to £1,310 £1,310 to £1,480
Engineers (Electrical)	£1,140 to £1,310 £1,310 to £1,480
Quantity Surveyors	£1,140 to £1,310 £1,310 to £1,480
Land Surveyors	£960 to £1,140 £1,140 to £1,310
Fittings and Furnishings Designer	£1,140 to £1,310

All applications to be sent, together with particulars of qualifications, experience and salary expected to:

E. T. Ashley Smith, F.R.I.B.A., County Architect, Springfield, Maidstone, Kent.

Vacancie: exist in the office of the Architect, Eastern Region, British Railways, at King's Cross Station for BUILDING SURVEYORS in connection with the alteration and modernisation of existing buildings. The office is engaged on a wide range of existing buildings and gives responsibility for administration and site supervision for those with ability. Salary range £945—£1,020. Starting salary will be determined in accordance with qualifications and experience. Modern working conditions, five-day week, rail travel concessions. Apply in writing to the Architect, c/o Chief Civil Engineer, British Railways, Eastern Region, King's Cross Station, London, N.1. 7561

METROPOLITAN BOROUGH OF LAMBETH
SENIOR ASSISTANT ARCHITECT
HOUSING DEPARTMENT

Applications are invited for the position of Senior Assistant Architect. Applicants must hold the diploma of the Royal Institute of British Architects, or equivalent, and have experience in housing design, conversions, etc. Salary within the scale of £1,310 per annum to £1,480 per annum plus London weighting. Application form from Town Clerk, Lambeth Town Hall, Brixton, S.W.2 (quote 111 (c)). Closing date 27th May. 7527

NORTH EAST METROPOLITAN REGIONAL HOSPITAL BOARD
W. G. PLANT, Dip.Arch. (L'Pool), F.R.I.B.A., Regional Architect.
APPOINTMENT OF
ASSISTANT REGIONAL ARCHITECT

The Board is engaged on a large and expanding programme of Hospital Development and has a vacancy for an Assistant Regional Architect who will be required to control several major projects ranging in cost from £250,000 to £2,000,000.

Applicants for the post must be registered architects having passed the requisite examinations, and must be good designers with experience in the design and management of substantial projects and experience in controlling a group of architects working as a team.

Experience in Hospital work, while not essential, is desirable.

Salary £1,875—£2,225.

Five-day week. Leave—25 days. Superannuable.

Application forms from the Secretary, North East Metropolitan Regional Hospital Board, 40 Eastbourne Terrace, W.2, to be returned by 3rd June, 1961. 7526

CITY OF CARDIFF
CITY SURVEYOR'S DEPARTMENT

Applications are invited from suitably qualified persons for the vacant position of:

SENIOR TOWN PLANNING ASSISTANT, A.P.T. Grade IV (£1,140—£1,310).

General Conditions of Appointment may be obtained from the undersigned, to whom should be sent all applications in envelopes suitably endorsed, stating age, qualifications and experience, and names and addresses of three referees. Closing date—31st May.

S. TAPPER-JONES,
Town Clerk.

City Hall,
Cardiff. 7529

QUANTITY SURVEYING ASSISTANTS required by

ADMIRALTY
WAR OFFICE
AIR MINISTRY
MINISTRY OF WORKS

Posts in London, Provinces and overseas. Salaries in London for candidates with suitable experience range from £752 p.a. at age 21 to £1,188 p.a. Write for particulars of vacancies in each Department, and forms, to Ministry of Labour, Technical and Scientific Register, 26, King Street, London, S.W.1. (Room 403). 7603

COUNTY BOROUGH OF WALLASEY
APPOINTMENT OF PRINCIPAL ASSISTANT
J.N.C. Scale "A" (max. £1,565)

Applications are invited from Fellows or Associates of the R.I.B.A. for the above mentioned appointment. The commencing salary will be according to capabilities and experience and favourable consideration will be given to the provision of housing accommodation if required. Forms of application may be obtained from the Borough Architect, Town Hall, Wallasey, to whom they should be returned by the 26th May, 1961.

A. G. HARRISON,
Town Clerk.
7544

CITY OF LANCASTER
APPOINTMENT OF CITY ARCHITECT

Applications are invited for the above appointment. Salary Scale £2,170 × 4 increments of £75—£2,470. This is the maximum salary scale within the Joint Negotiating Committee's Scales.

Applicants must be Corporate members of the Royal Institute of British Architects and preferably also of the Town Planning Institute.

This is a first appointment of a Chief Officer for the Architectural Department, and the Council are seeking a person of wide experience of architectural design. Experience of central area re-development will be of great value.

Further particulars and conditions of appointment are obtainable from the undersigned.

Last date for receipt of applications, 24th May, 1961.

J. D. WADDELL,
Town Clerk.

Town Hall,
Lancaster.
3rd May, 1961. S7391

BUCKS COUNTY COUNCIL

Applications are invited for the following appointments in the County Architect's Department:—

ASSISTANT ARCHITECT, A.P.T. Grade V, £1,310—£1,480 p.a.
ASSISTANT ARCHITECT, A.P.T. Grade IV, £1,140—£1,310 p.a.
FEMALE MACHINE OPERATOR, General Division, £220—£530 p.a.

These appointments are superannuable and subject to medical examination.

A weekly allowance of 25s. and return fare home once every two months may be paid for six months to newly appointed married officers of the Council unable to find accommodation.

Applications, on forms provided, must be returned by Monday, 29th May, 1961.

F. B. POOLEY,
County Architect.

County Offices,
Aylesbury,
Bucks. S7393

COUNTY BOROUGH OF WEST HAM

Applications invited for position of CHIEF ASSISTANT PLANNING OFFICER, J.N.C. Scale "C"—£1,560/£1,825 p.a., plus Essential Car Allowance. Applicants should hold a recognised qualification in Town Planning and preferably an associated professional qualification and should be experienced in all aspects of urban planning, including statutory requirements of a Local Planning Authority. A vast quantity of redevelopment work is in hand leading to urban renewal schemes and town centre redevelopment proposals.

An ASSISTANT PLANNING OFFICER, A.P.T. IV—£1,140/£1,310 p.a., plus London Allowance, and a PLANNING ASSISTANT, A.P.T. I/III—£645/£1,140 p.a., plus London Allowance, are also required, and suitably qualified applicants are invited to apply.

Applications, stating age, qualifications and experience (together with names of two referees), to be addressed to the Borough Architect and Planning Officer, 70, West Ham Lane, Stratford, E.15, by 30th May, 1961. S7396

ROYAL BOROUGH OF KINGSTON-UPON-THAMES
APPOINTMENT OF ARCHITECTURAL ASSISTANT
(A.P.T. Grade II—£815—£960 per annum plus London Weighting)

Applications are invited for the above-mentioned appointment. Details and application forms obtainable from Borough Surveyor, Guildhall, Kingston-upon-Thames, and returnable by 31st May, 1961.

L. V. POWELL,
Town Clerk.

Guildhall,
KINGSTON-UPON-THAMES.
9th May, 1961. 7622

COUNTY BOROUGH OF NORTHAMPTON
DEPUTY BOROUGH ARCHITECT AND TOWN PLANNING OFFICER
SCALE: £1,646—£1,896

Full particulars of this appointment and form of application, returnable by 5th June, from Borough Architect and Town Planning Officer, Guildhall, Northampton.

C. E. VIVIAN ROWE,
Town Clerk.
S7626

RADNORSHIRE COUNTY COUNCIL
APPOINTMENT OF ASSISTANT ARCHITECT

Applications are invited for the appointment of ASSISTANT ARCHITECT in the County Architect's Department. Salary Grade A.P.T. IV of the national scales (£1,140—£1,310 p.a.), the point of commencement in this grade to be according to experience.

Candidates must have passed the Final Examination of the R.I.B.A. and be suitably experienced.

A proportion of approved removal expenses and a lodging allowance and rail fare to present home every three weeks for a period of up to three months will be paid to a married man appointed to this post.

The appointment is subject to the N.J.C. conditions of service and to the Local Government Superannuation Acts and will be terminable by one month's notice on either side.

Applications, stating age, qualifications, details of experience and the names and addresses of two persons to whom reference may be made must reach the undersigned by Wednesday, 24th May 1961.

D. C. S. LANE,
Clerk of the Council.

County Hall,
Llandrindod Wells,
Radnorshire. 7600

BOROUGH OF HOVE
SENIOR TOWN PLANNING ASSISTANT

Applications are invited for the above appointment in the Borough Engineer & Surveyor's Department at a salary in accordance with A.P.T. IV (£1,140—£1,310).

Candidates must have passed the final examination of the Town Planning Institute or equivalent, and have had suitable practical experience. The successful applicant will be engaged mainly on redevelopment schemes and planning control. One month's notice is required on either side.

Consideration will be given to the provision of housing accommodation if required.

Applications stating age, qualifications, present and previous appointments and experience together with the names of two referees, should reach the Borough Engineer & Surveyor, Town Hall, Hove, 3, by Saturday, 3rd June, 1961.

JOHN E. STEVENS,
Town Clerk.
7634

COUNTY BOROUGH OF EAST HAM
HOUSING DEPARTMENT
APPOINTMENT OF ARCHITECTURAL ASSISTANT

Applications are invited. Salary Grade A.P.T. II (£815 × £30(4) × £25(1)—£960) plus London Weighting.

Applicants should be experienced in the preparation of working drawings, details for construction of new dwellings and conversion of existing properties.

Further details and application form (returnable by 7th June, 1961) from the Town Clerk, Town Hall, East Ham, E.6. S7553

SURREY COUNTY COUNCIL

Applications invited for appointment of ASSISTANT ARCHITECTS on GRADE V (£1,310—£1,480 p.a. plus £45 p.a. London Allowance). Must be A.R.I.B.A. and capable of leading a small team dealing with medium and large scale contracts.

Candidates will be appointed at the appropriate point within the scale according to age and ability.

Approved removal expenses will be paid to successful candidates.

Full details, present salary and three copy testimonials, preferably one from present employer, to County Architect, County Hall, Kingston, as soon as possible. S7568

HAMPSHIRE COUNTY COUNCIL

PLANNING ASSISTANT, A.P.T. III/IV (£960—£1,310) according to qualifications and experience, required for South-West Area Planning Office at Lyndhurst. Candidates should be Corporate Members of the Town Planning Institute or hold another appropriate professional qualification, and have had all-round planning experience, especially in Development Control in the Planning Department of a Local Authority. Applications, stating age, education, qualifications and experience, together with a copy of one testimonial and the names of two referees, should reach the Clerk of the County Council, The Castle, Winchester, by 31st May. 7601

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BOROUGH OF AYLESBURY
ARCHITECT'S DEPARTMENT

Applications are invited from suitably qualified persons for the following permanent posts:—

(*a*) ASSISTANT ARCHITECT (A.P.T. V £1,310 £1,480).

(*b*) ARCHITECTURAL ASSISTANT (A.P.T. II £815—£960).

The Council has embarked on a scheme of town expansion under the Town Development Act, 1952, for the acceptance of industry and population from the greater London area entailing a considerable architectural programme including the provision of new civic buildings, town centre shopping facilities, industrial and housing development.

The appointments will be subject to the Local Government Superannuation Acts and to the National Scheme of Conditions of Service and will be terminable by one month's notice on either side. The successful candidates will be required to pass a medical examination.

Applications stating age, qualifications, present and past appointments and details of experience together with the names of two referees, should be sent to C. M. Harding, A.R.I.B.A., Resident Architect to the Borough Council, 16, Walton Street, Aylesbury, Buckinghamshire, to be received not later than Thursday, 25th May, 1961.

R. D. W. MAXWELL,
Town Clerk.

Town Hall,
Aylesbury. 7566

CUMBERNAULD NEW TOWN

ARCHITECTS APT. VI-VII £1,305—£1,670
APT. III-IV £960—£1,310

ARCHITECT-PLANNERS APT. IV-V £1,140—£1,480

are required in the office of the Chief Architect and Planning Officer, L. Hugh Wilson, Esq., O.B.E., F.R.I.B.A., A.M.T.P.I., for a wide variety of work including—

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HIGH FLAT BLOCKS
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5 day week; Assistance with housing where appropriate; local Government Superannuation.

Applications by May 29th from qualified persons on form to be obtained from the General Manager, Cumbernauld Development Corporation, Cumbernauld House, Cumbernauld, Glasgow. 7638

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CITY OF PORTSMOUTH
CITY DEVELOPMENT DEPARTMENT

Applications are invited from candidates with Inter A.M.T.P.I. or equivalent for appointment of DEVELOPMENT ASSISTANT A.P.T. Grade III (£950—£1,140), commencing salary according to experience.

Applicants should have a comprehensive knowledge of Town Planning and experience in Development Control.

Consideration will be given to the provision of housing accommodation for successful applicant.

Application forms obtainable from City Development Officer, 1, Western Parade, Portsmouth, to be returned by 29th May, 1961. S7604

Competition

3½d. per inch; each additional line 3s.

HOUSE DESIGN COMPETITION

An Open Competition for four types of house design is being sponsored by the Gas Council. Conditions are now available, and designs must be in by 31st August, 1961.

Designers are called on for the minimum amount of work in presenting their ideas, so that effort may be concentrated on solving design problems in new ways, offering exciting new possibilities for living in modern society.

Assessor: Mr. George Grenfell Baines, O.B.E., F.R.I.B.A., M.T.P.I.

The competition is open to Registered Architects, and Students R.I.B.A. if in association with a Registered Architect.

Applications for Conditions to:
Secretary,
HOUSE DESIGN COMPETITION,
THE GAS COUNCIL,
1, GROSVENOR PLACE,
LONDON, S.W.1. S7554.

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ARCHITECTURAL ASSISTANT required for North Devon Office. Box TC6673.

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SENIOR ASSISTANTS required. Please apply to F. G. Frizzell, A.R.I.B.A., 80, Portland Place, W.1. LANgham 1732. TC4943

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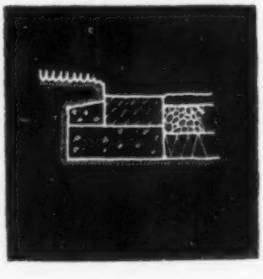
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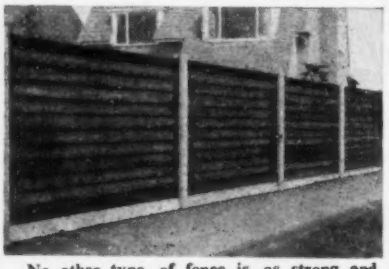
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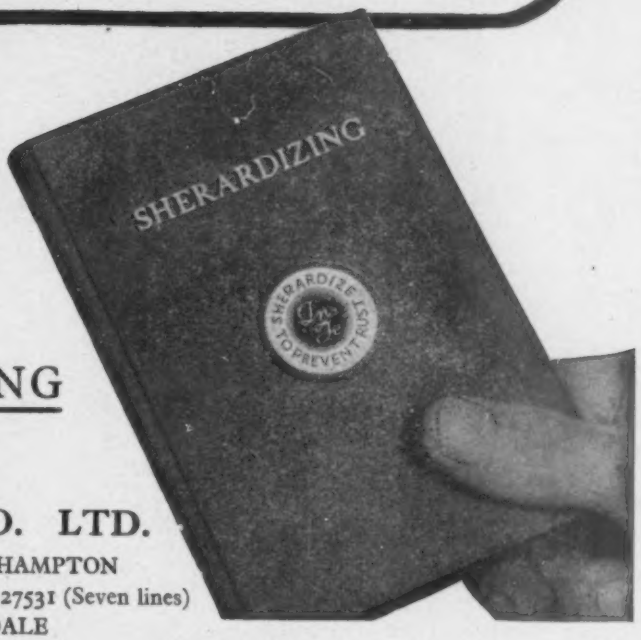
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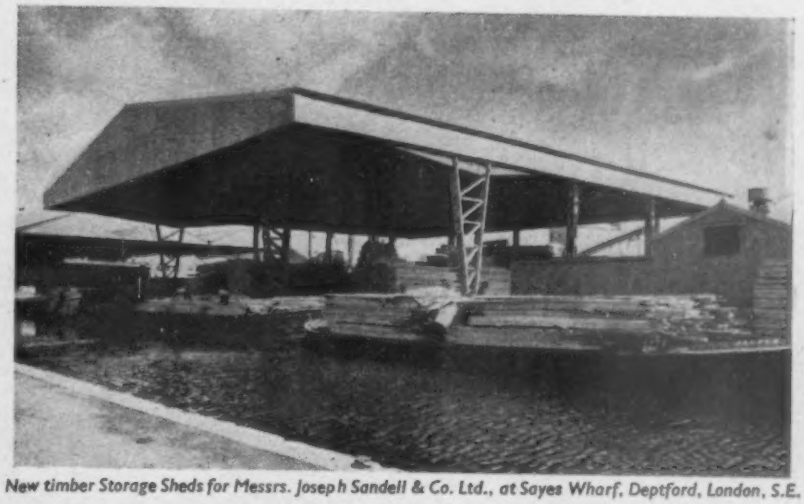
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were used in this imposing timber structure to solve the problem of transferring the extremely high forces to be carried at the junction between the cantilevered main beams and the lattice columns supporting the extensive roof area. These 4in. TECO shear plates were the largest used so far by the fabricators, who experienced no difficulties—either in the Workshop or on site—in their use.

Fabrication & erection by:-
Beves & Co. (Structures) Ltd.
Shoreham-by-Sea,
who also provided the photograph



New timber Storage Sheds for Messrs. Joseph Sandell & Co. Ltd., at Sayes Wharf, Deptford, London, S.E.

IF YOU HAVE A PROBLEM INVOLVING THE USE OF TIMBER CONNECTORS, ASK US FOR TECHNICAL AND DESIGN DATA ON:-

"TECO" (registered) 2½" & 4" dia. double-bevelled Split-rings

"TECO" (registered) 2½" pressed & 4" malleable Shear Plates

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Heating Engineers: Ellis (Kensington) Ltd.

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